

AMERICAN BEE JOURNAL.

ESTABLISHED IN 1861 OLDEST BEE-PAPER IN AMERICA

DEVOTED EXCLUSIVELY TO THE INTERESTS OF HONEY-PRODUCERS.

Published Weekly at 118 Michigan St.

GEORGE W. YORK, EDITOR.

\$1.00 a Year—Sample Copy Free.

38th Year.

CHICAGO, ILL., JULY 7, 1898.

No. 27.

CONTRIBUTED ARTICLES

(All rights reserved by the Northern Newspaper Syndicate, of Kendal, England.)

PROFITABLE BEE-KEEPING.

HINTS TO BEGINNERS,

C. N. WHITE, OF ENGLAND.

Author of "Bees and Bee-Keeping," "Pleasurable Bee-Keeping," etc.

No. 1.—INTRODUCTORY.

No one who has given the subject of bee-culture, or the relationship of bees to flowers, the least consideration will deny that bees play a most important part in the economy of nature, and it is not too much to say that without bees our fruit and seed supply would, to say the least, be extremely limited. Bees are as necessary to flowers as flowers are to bees. The flowers by their beauty and the delicate perfume they give off, attract the busy bee to the nectaries from which they extract the honey there secreted; but while busy upon this work they at the same time become dusted with pollen-grains released by the anthers when in a state of ripeness. This pollen, or fertilizing dust of the flower must be carried from the male to the female flower, or to the stigmata, the female organs of the flower of the same species, otherwise fructification cannot take place, and fruit and seed would be impossible. This is frequently noticed to be the case when, owing to continual bad weather during the time that fruit-trees, for instance, are in bloom, the flowers are not fertilized, and consequently there is a failure of the crop. The important work of fertilization is thus unconsciously being carried on by the busy bee, while it robs the nectaries of their sweet secretion. The peculiar formation of the flowers in many instances proves that the bee, or other insect, is intended to be the agent in the fertilization of bloom.

Cross-fertilization is also evidently intended, for those flowers upon which both the anthers and stigmata are found are not both at the same period in a state to effect fertilization; that is to say, when the anthers of a flower, also bearing stamens, are scattering their pollen, the stigmata are not in a condition to receive it; hence, it must be carried to, and used by, that or those flowers on which the stigmata are in a receptive condition. Thus cross-fertilization is effected, and vigor transmitted instead of feebleness—the usual result of self-fertilization. From this point of view alone it is most desirable that bee-culture on modern principles should be taken up more generally in rural districts.

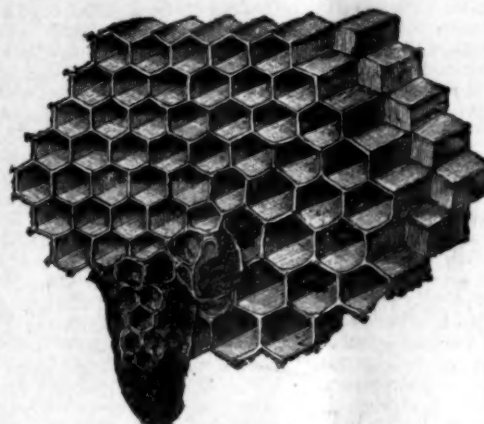
BEE-KEEPING PAYS.

Then, again, the direct pecuniary result of careful and systematic management is so encouraging that it is surprising apiaries are not met with on every farm and in every cottage garden. The number of colonies kept would of course be determined by the interest taken in the work and by the extent of bee-pasturage in the immediate neighborhood, but certainly a few hives might be stood in almost every garden if only as a source of interest and a means of providing a valuable and pleasant food.

For many years the effects of agricultural depression have been felt throughout the country; at the same time prices of agricultural produce have fallen until it is difficult, sometimes impossible, to make both ends meet. Various means have been suggested by those interested in the prosperity of agriculture, the oldest of our national industries, to minimize the effects of the general downward tendency—for instance, improved systems of dairying; more extensive and better management of poultry; fruit-culture; and the manufacture of jam. But important and valuable tho such occupations may become as a means adopted to add to the profitableness of farming, there is a most interesting, intellectual, and at the same time exceedingly profitable, rural occupation—*bee-keeping*—which, if properly, that is, intelligently, pursued would prove of great value to the agriculturist.

The extension of bee-culture as a means of adding to the income has been rapidly going on since it was demonstrated that bees could be managed without discomfort to the operator, and that a profit of 50 per cent., 100 per cent., and even more was easily procurable.

Some countries or districts are well known for the extent of the honey-producing crops grown. Flowers alone, unac-



A Piece of Comb.

companied by fine weather, are useless; but usually when the weather is favorable to the blooming of flowers, it is equally so to the ingathering of nectar by the bees.

It is at such times when both the crops and the weather are in favor of the apiarist, that the large returns per hive recorded are obtained. No one need despair of making bee-keeping a success, for it seldom happens that two bad seasons come together, and generally during any season, if one crop is mist through unfavorable weather, advantage may be taken

of another that succeeds it; but then it is only the intelligent bee-keeper who, like the successful man of business, having laid his plans works them out and receives the due reward of forethought and energy.

ONE SEASON'S WORK.

It may reasonably be asked: "What will an ordinary colony of bees gather in one season?"

"Bees do nothing invariably" is a trite saying. It is not only in what may be termed poor honey-producing districts that the returns are the worst, for I call to mind a parish where one bee-keeper took over 100 pounds per hive, another over 90 pounds, and another not 10 pounds per hive, tho all were working on the same system. The difference was undoubtedly due to forethought and energy in the first two cases, and lack of these desirable qualities in the third.

The best example of continued success I know of is that afforded by Mr. A. Abraham in the management of his three colonies. He is a farmer's son, and attends to his bees in the odd hours he can get after the ordinary work on the farm is over.

In 1892 he took 120, 105, and 103 pounds of honey, or an average of 109 pounds per hive: in 1893, 175, 167, and 126 pounds, average 156 pounds; in 1894, 205, 203, and 156 pounds, average 188 pounds; and in 1895, 185, 180, and 154 pounds, average 173. These three colonies have yielded honey that has produced on an average £3. 10s. per hive for the past four years.

A farmer living at Downham, near Ely, commenced bee-keeping with one fully equipt colony, in the spring of 1894, after attending a course of lectures in his village. At the end of the first season his balance sheet showed an expenditure of 42s. 6d., and income by the sale of honey of 101s. 5d., a profit of over 120 per cent. This year's return was better still. In many parts of the country, this year, the return of over 100 pounds per hive is by no means uncommon. One bee-keeper in Cambridgeshire, with 26 hives, took an average of 75 pounds per hive.

These are a few examples that might be multiplied, but they are sufficient to show that if situated in a good district and favored with genial weather, the bee-keeper must be to blame if, carrying out a few simple rules, he does not make bee-keeping a profitable undertaking.

CONTENTS OF THE HIVE.

In addition to the bees an examination of any hive of bees will reveal the presence of combs, composed of wax and containing honey and pollen. There will also be found, very frequently in undesirable quantities, propolis—a product valuable to the bees, but a nuisance to the bee-keeper.

The combs are made from wax, secreted in the body of the bee, from honey or syrup it has consumed. They consist of cells not quite half an inch in depth on each side of a mid-rib. The cells are built horizontally, and from the mouths of those on one side to the mouths of those on the opposite side of the mid-rib, measure $\frac{3}{8}$ inch. The distance from the mid-rib of the comb to that of the next is $1\frac{1}{2}$ inches barely; therefore, the space between the faces of the combs is about $\frac{1}{2}$ inch. The great majority of the horizontal cells are, or ought to be, worker size, measuring across the mouths of the cells 5 to the inch; but upon the bottom edges of the combs, and often in larger quantities as the result of bad management, there are found larger horizontal cells measuring 4 to the inch. These are drone-cells.

There is still another kind of cell, acorn-shaped, built upon the bottom edges of the combs, and sometimes on the face of the combs among the worker-cells, termed queen-cells, but they are only built when the hive is becoming too crowded with bees, and they decide to send out a portion of the colony—a swarm—to found another colony. The building of combs not only represents the loss of much energy by the bees, but it also means the loss of a large quantity of honey and much valuable time.

Various calculations have been made as to the amount of honey the bees consume in order to secrete one pound of wax, some putting it as high as 20, and others as low as 10 pounds. But whatever the bees really use it is an amount we cannot, with a view to profit, afford to lose. At the same time, by preventing the bees building their combs from the wax they secrete, we have their energies for several days directed to the gathering and storing of honey, when they would otherwise be comb-building. The immense importance of this saving of time will be rightly understood when we consider that it may make a difference of 20, 30, or more pounds of honey in favor of the bee-keeper. It was recorded in the British Bee Journal in 1888, that one colony gathered 40 pounds in less than three days, and another 58 pounds in six days. The late Rev.

G. Raynor stated, in 1889, that on June 15 his best hive gained 9 pounds in weight.

In the cells of the combs the bees store their two kinds of food—honey and pollen. Honey is the carbonaceous heat-giving and fat-forming food, and alone forms the food of the bees in winter, but at other times it is used by the bees in conjunction with pollen, the nitrogenous or muscle-forming food, as a perfect food for themselves when working, and for the rearing of grubs. The two foods together form a food without which brood-rearing is impossible; hence, the advisability of giving a supply of artificial pollen when the supply from natural sources fails.

The best substitute is pea-flour, which may be scattered on shavings in a straw-skep or box. The bees must be enticed to it by a little honey; then, when they have once found it, they will not cease to carry it into the hive until they can obtain the genuine article from flowers. Honey is also one of the choicest foods for man, and not the least valuable, as it is the only food that, having undergone chemical change in the body of the bee, can be taken directly into the system and used as a force-producer without having to pass through the ordinary digestive process. Certain flowers produce pollen in great profusion, and then it often happens that there is a superabundance stored in the combs. In movable-comb hives this is not a serious disadvantage unless all the hives are in a similar condition. If there are only a few hives in which the combs are overloaded with pollen, some such combs may be given to other colonies requiring a more liberal supply of this kind of food.

Propolis is a resinous substance found oozing from the trunks of certain trees, and is gathered by the bees for the purpose of filling up cracks and crevices, as well as covering intruders, such as snails, that enter the hive and cannot be removed. To the bee-keeper propolis is a great annoyance, as it makes such a sticky mess of the fingers and other things touched during manipulations. Some bees gather more propolis than others; therefore, those who aim at perpetuating any particular strain of bees should endeavor in the breeding to eliminate this and other undesirable traits.

[Continued next week.]



Loaded Bees in the Sections, Etc.

BY J. A. GOLDEN.

In the February Review, I said Mr. Doolittle and others have told how the field-bees give the honey to the nurse-bees, and the latter store it in the cells. My bees, as a rule, do not follow that practice. I know this to be true, as I have spent a great deal of time sprinkling bees with flour and then watching them through the glass as they pass up and deposit their loads of nectar in the sections.

Now, in calling attention to my observation as to the above statement, I did not wish to be understood that field-bees did not transmit their load of nectar to other bees on return as well, but to show that bees also deposited direct in the cells.

Having read Mr. Doolittle's article on page 321, I doubt not he has reference to my article, having overlooked how I was convinced. He says: "Mr. Golden, I believe, claims that he knows that they do this; but if he has told us why, or how he knows it, I have failed to see the place." But as Mr. Doolittle seems to intimate in his concluding paragraph that if E. Gallup and himself are right, all other observations are nothing but fallacious, and if deceptive, it would be well to know it.

Now, for the benefit of the readers of the American Bee Journal I will here give my observations more fully, and I want it distinctly understood that my evidence for believing as previously stated, is seeing, which is in itself believing. Therefore, it has been a fixt rule (with me) in the study of bees and their manipulation, to make careful and painstaking observations upon every subject relating to them, their habits and their work coming under my observation, and thus I have found much convincing evidence that greatly conflicts with others upon the same subject, work or habits of the honey-bee, regarding which they have been equally vigilant in their observations. Now, this being true, it does not prove, to my mind at least, that one observer has given facts and the other falsity.

In regard to the question of where and how field-bees deposit their load of nectar on returning from the field, I had learned long before reading Mr. Doolittle's observation, by the aid of two observatory hives, and at a time when bees were working in the height of the flow. My plan was this: When bees were dropping by the hundreds upon the alighting-board, I would sift flour over them, see them pass in, then care-

fully lift the frame and would find floured bees passing here and there. Keeping a close watch, I would see one enter a cell, deposit her load, then withdraw therefrom, brush herself, and fly from the comb in search of another load. Others, as I also observed, would pass here and there over the combs seeming somewhat bothered. I supposed from this that they were depositing their day's gathering in some other comb, and were hunting for it. But other bees could be seen giving up to those which we designate as house or nurse bees.

Continuing my observation, I fitted up supers, glassing the sides, thus showing the sections, and continuing the dusting process, I found the same convincing evidence, that the market bees were seen depositing nectar in the section-combs. Thus, I was theoretically led to devise the side-entrance from the bottom of the hive, intersecting the same in supers, keeping the entire force of the colony together during the season, as per my method previously given in the bee-papers. I greatly enjoy this manipulating, and not only so, but, as I have previously stated, it has been the means by which I was enabled to satisfy every claim, financially, that stood against me, both just and unjust, from the fact that it reduced the expenses for hives, frames, comb foundation, and other expenses in wintering, etc., besides giving greater yields, nearly doubling in comb honey the amount by that of the increase method. Now, please remember, I am speaking only for my locality.

In regard to the entrances that Mr. Doolittle speaks of, I know nothing about that, but I do remember the kind of entrance my father gave for his bees, over 50 years ago. It was so large that one day in wheat harvest an old neighbor who, having imbibed the contents of an old, long-neck wine-bottle, came for some honey. No one was at home but mother and myself, and as no honey had been taken, mother could not fill his order, so the old man swore he must have some honey, and staggered out to the apiary of a hundred colonies. Selecting one of the largest hives, he laid down and rolled himself under the hive, thrusting his hand and arm up into the hive, drawing down a great bunch of comb and bees, and, as mother and I rushed to the rescue of the old man, we were badly stung, but not in comparison to the old man, who did not appreciate eating his honey after getting it, but was taken home and a physician called. But in three months the old man died. So you see large entrances were used in those days, and my father used to say that bees would not swarm so much when no bottoms were used; and many times the combs were built clear down to the ground from those great big hives, and whether hereditary or not, I surely advocate a large entrance.

As to the side passage-way, as I use in my method, it is as eagerly accepted and used by the bees as a pedestrian with a crate of honey on his shoulder would seek the unobstructed sidewalk in Chicago to avoid delay. Morgan Co., Ohio.



Home Marketing of Honey—An Experience.

BY F. L. THOMPSON.

Three years ago I tried to get up a home market for extracted honey by soliciting from house to house. In this way I sold from perhaps 700 to 1,000 pounds—I have forgotten the exact amount. I concluded, however, that it did not pay. By intense application I could make good daily wages, but that was all. The work was not at all what I was fitted for, and the perpetual feeling of being a round bolt in a square hole was wearing, to say the least, without mentioning the time thus wasted for a mere pittance (the difference between the wholesale and retail price, with the expenses of retailing) which might have been far more profitably employed, mentally, if not financially. At that time my plan was simply to show people the honey, letting them taste if they wanted to (but very few did).

The past winter I concluded to try it again, on a somewhat different plan. I had read of the wonderful success attending the plan of giving away samples, together with honey leaflets. I accordingly provided myself with a number of these leaflets, and printed some of my own, giving the gist of the matter in a very few words, so that it could be read through in half a minute or so. I gave away samples of my honey (a good quality), pouring it out of a nice, little majolica pitcher, holding about a quart and a half; and also at the same time samples of granulated honey, wrapped in little squares of parchment paper. In this way I called at about 500 houses, distributing my leaflets and circulars at each place.

Quite a number, perhaps 5 to 10 per cent., refused to take the samples at all. Perhaps about half of those that did take samples would take a quarter's worth of honey when I made my second call. Some took 10 cents' worth, and a few

5 cents' worth. A very few took a dollar's worth. I sold in all about 500 pounds. Not more than about one-third of those who had bought the first time did so again, when I made my third call. At many places I had to make three, four and five calls—they "hadn't the money" just then, or "had company," or something. I had learned by my former experience that when any one said "not to day," he or she (generally she) meant "not at all." Sometimes they would say, "Perhaps some other time." I made second calls at such places, but might have spared myself the trouble. Almost invariably it turned out that the above formula had been a mere evasion.

In giving away the samples, I took occasion to remark that the granulated sample was a proof of purity; that many would buy extracted honey if they thought they could get it pure; that I was a bee-keeper trying to get enough customers to take all my own honey; that the circulars told just why honey was a healthier food than sugar, and contained a number of recipes for cooking with honey; and more talk, if the opportunity afforded. I was generally well treated, perhaps more civilly than when I did not give away samples. But I met all the mean people I wanted to see, and a few more.

It will be seen that the sample-and-circular plan was not even as successful as my former one, which was poor enough. I do not know why that was; but I want to offer both these experiences as a solemn example to those who are enchanted by the siren voices of those who sing that the home market of the individual is the remedy for all ills. I have proved by two actual, prolonged trials that, for me, it is not; hence, it is reasonable to infer that the experience of some others may be like mine.

Of course, explanations may be given for my want of success. I know one or two who have had good success in selling honey from house to house. I think the appearance of their rigs and outfits "gave them away" as coming from the country. Result, confidence. Unfortunately, I couldn't fall back on that. When I put on poor clothes, or rather when I don't put on good ones, people take me—not for a farmer—but for a "sheeny" of the rag-buying or tin-peddling variety. My conscience wouldn't let me hire a female in a calico dress to sit in the wagon and personate the "old woman," and I couldn't afford a horse and wagon anyhow, just for that. Then, as intimated, I am a poor hand at the work. I can't think of the right thing to say, or the right words to express what thoughts I do have, until the opportunity has past.

Another bee-keeping friend sells a great deal of honey—always 10 pounds at a time—through his friends. When I started out in the work, he thought of course I could sell 10 or 15 buckets a day. I venture to say that if he had tried my plan, he would not have sold much more than I; while I can't try his because I haven't a wide circle of acquaintances, nor any who are apt to take orders from others for me. So it goes.

In every case, if instances of success in selling honey were analyzed, I believe it would be found that those who advocate the general plan of home marketing fail to take account of peculiar favoring circumstances in their own case. A man with a wide circle of acquaintances, in a thickly settled rural district, where he has lived 15 or 20 years, sells all his extracted honey without any trouble. He thinks, of course, anybody can do likewise. What nonsense!

Another, having all the peculiar qualifications of a salesman, has the luck to live not far from several unsophisticated rural towns, the inhabitants of which hang on his honied words, and tumble over each other in their efforts to contribute boodle to him. He writes an article telling of his fabulous successes. Very naturally; I would, too, in his place. Only, his experience is not representative. I fear mine is, to some extent—on the principle that fools are commoner than geniuses.

Some other results of my experience run counter to accepted ideas; especially the idea, that once get a person to taste good honey, and you have a customer. The saying that if a person once buys good honey, he will keep on buying, was also knocked into flinders. Now, I have a theory to account for the latter fact. The stomach craves just so much of each class of foods. More than that, it does not care for, except occasionally, as a tidbit or luxury for the palate. Now, usually, when people buy honey, and eat it, they eat just as much sugar and fruits, and so forth, as they ever did; consequently they don't feel the need of any stomach room for the honey. See?

Again, it would astonish the advocates of home individual marketing to ascertain how many people there are who don't like honey. Yes, I mean what I say. They don't like it. Does that sound heretical? It is so, tho. I can appreciate this attitude, because I am one of that class myself. After eating honey for years, under all circumstances, I am forced to the conclusion that I don't like honey, and never will. Neverthe-

less, I shall keep on eating it, for the considerations in Prof. Cook's article on honey as food, a year ago, affect me powerfully. But it goes without saying that the vast majority of those who don't like a thing, won't have it, and that settles it.

And yet, in spite of my poor success, I am of the opinion that all those who would like honey well enough to buy it continuously, if it was brought to their notice, are numerous enough to take all our honey at a good price. My point is, that they are not numerous enough to make the attempt of the average bee-keeper, and average salesman, to reach them, a paying job.

I think that those who advocate home marketing in general terms without qualification, are making a mistake. They are advocating something that it will not pay the average man to undertake.

All the foregoing is an argument for organization, as the one thing left. I need not enlarge on the familiar topic. But two thoughts occur to me that I have not elsewhere seen mentioned, except a hint or two in foreign papers. One is, that advertising by means of honey leaflets does not hit just the right spot. Do we generally read the printed matter that comes with "Rough on Rats," or "Hood's Sarsaparilla?" If we depended on that, we wouldn't have much idea of those articles, or any other proprietary drug or food. But we have a pretty vivid idea of many such things—Ivory Soap, and Scott's Emulsion, and Liebig's Extract, etc. How did we get that idea? From newspaper advertisements, of course. That is my second thought—that it is possible to properly advertise honey. But only a powerful organization can ever do it. Bargain store grocery advertisements show that common foods, also, come under advertising with profit. "The newspaper habit" is a bad one; but it is an ill wind that blows no one any good, and we might as well take a pecuniary advantage of the fact that the average American citizen does depend for his mental sustenance on that species of literature. There is no question that it would pay if once consistently carried out. It is what all successful firms do. Montrose Co., Colo.



Feeding Back Extracted Honey to Produce Comb Honey.

BY HON. R. L. TAYLOR.

It has been thought worth while to repeat the experiment in feeding back extracted honey for the completion of unfinished sections. It has also been found more convenient and desirable to do so owing to the fact that the character of the season has been such that the percentage of partially-filled sections has been greater during the past season (1896) than ever before. This was owing to the shortness of the honey season and the slender character of the honey-flow. The extent of this was such that but now and then a colony completed even one case.

For the purposes of the experiment four colonies were selected. All were hybrid bees, so-called, and very strong. For a brood-chamber, each colony was given a single section of the Heddon hive, containing frames equal to five Langstroth frames. Doubtless a brood-chamber even smaller—perhaps as small as 2½ Langstroth frames—would have been better, and this for two reasons:

First, much less of the honey would have been required for the rearing of brood, as the extent of that would have been reduced by one-half. I have heretofore given reasons tending to show that it requires two pounds of honey for the production of one pound of brood, and that a section of the Heddon hive, if almost entirely devoted to brood, would contain about ten pounds of it. If this is substantially correct, it will be seen by consulting the table presented herewith, that 20 pounds of honey would be required every three weeks to produce the brood of each of the colonies used in this experiment. This amount of brood might have been reduced by one-half without detriment to the well-being of the colony, and one-half the colony saved.

Second, what I have just said appropriately introduces this point. The number of bees continually hatching from five Langstroth frames full of brood constantly increases the strength of the colony so that if feeding is continued any length of time, with the crowding necessary for the production of comb honey, swarming is induced. This would be detrimental to the highest success of the work. With about half that amount of brood the strength of the colony would be kept good, and swarming avoided, for it must not be too readily accepted that a small brood-chamber without reference to the degree of smallness conduces to swarming.

The feeding was begun July 15, soon after the closing of the flow from clover and basswood. Two or more cases of

sections were kept upon each colony, and the honey given as rapidly as the bees would take it. The honey was prepared for feeding by thoroughly incorporating with it about one-half its own weight of water, on the supposition that in this condition the bees would handle it more rapidly.

The work with colonies 2, 3 and 4 was closed Aug. 6, one day more than three weeks, owing to the fact that on that date, or shortly before, they had cast swarms, rendering it undesirable to continue them in the work. Colony No. 1 was retained in the experiment until Aug. 29, nearly 6½ weeks. This colony was particularly adapted to comb-building, and showed that, during the first half of the period, but later owing probably in part to the low temperature which prevailed during August, its work was less satisfactory.

Up to Aug. 10 there was no noticeable amount of honey coming from the fields, but later there was some considerable being gathered, the colony No. 1, being fed, seemed to participate to a very small extent in it, not bringing enough to tinge the color of the comb honey in process of construction, and so I judge not sufficient to make it an appreciable element in the problem under consideration.

Turning now to the table, we find some questions presented which are not altogether easy to answer. We find there so striking a difference between the work of colonies as that one requires more than two pounds of honey to enable it to add one pound to its store of comb honey, while another required but a trifle more than a pound and a third. It might be surmised that the one requiring the larger amount had ex-

NUMBER OF COLONY.	Net weight in pounds of unfinished sections put on the hives.	Amount fed, in pounds.	Amount of honey, in pounds, when completed.	Gain in pounds.	Per cent. of gain to amount fed.	Pounds of honey fed for each pound gained.	Gain in honey in brood-nest.	Per cent. of gain to amount fed with honey in brood-nest considered.	Heddon frames of brood July 15.	Heddon frames of brood at the end of the experiment.
1.....	225	168¾	317¾	92¾	55.	1.81	10¾	61.	7¾	6¾
2.....	83	78¾	111¾	46¾	64.7	1.54	5¾	65.7	8¾	8¾
3.....	99¾	75	138	38¾	49.	2.04	5¾	55.6	8¾	6¾
4.....	66	67¾	114¾	48¾	71.9	1.34	¾	72.5	8¾	8¾
Total....	452¾	378¾	679¾	227¾	58.7	1.70	16¾	63.		

ended it in the production of a larger amount of brood. If, however, we allow that No. 3 reared an amount of brood equal to that reared by No. 4, viz.: eight Heddon frames full, and deduct from the amount fed each the 20 pounds supposed to be necessary for the rearing of the brood, we see No. 4 accounts fully for all the remainder in its case, while No. 3 lacks 18¾ pounds of doing so.

In like manner, on the above supposition, No. 2 accounts for nearly all the honey given it, while No. 1 comes short of it by more than 30 pounds. It can hardly be that the amount of honey required by different colonies for the rearing of the same quantity of brood can vary very greatly, nor the amount required by the adult bees for food where the strength of the colonies is about equal. At present I see only two other ways of accounting for the deficit, viz.: quiet robbing and varying amounts required for the production of wax. Robbing as an outlet is hardly to be relied upon; wax-production seems more likely to afford some measure of relief.

If the table is examined closely it will be seen that the sections given Nos. 1 and 3 averaged much heavier than those given Nos. 2 and 4. Can it be then that the much greater proportionate amount of cappings of the honey to be done in the one case calls for the production of wax for use in the capping as to account for the apparent discrepancy? It may in some measure, and, besides, some colonies may practice putting more wax into a given extent of comb so as to make it stronger and safer. It is plain there are abundant subjects yet for investigation in bee-culture.

Figures may be made in different ways to determine the amount of profit there is in feeding back. I consider the value of the unfinished sections as about equal to that of the extracted honey, say 6 cents. This would make the value of these two articles entering into this experiment \$50.38. I compute the value of the 679¾ pounds of comb honey produced, at 12 cents per pound, which gives a total value of \$81.57, or a profit of nearly 62 per cent.—Review.

Lapeer Co., Mich.

Making Improvements in the Race of Bees.

BY A. BEAMAN.

In looking over the pages of the American Bee Journal for this year, I find two communications and several references to the improvement of the race of bees. It is to be regretted that in one or two instances the thoughts of the writers ran off on the side line of creation—away from the fact that, as every observant bee-keeper knows, bees vary in many particulars as to size, prolificness of queen, hardiness, disposition, etc.—and come to the conclusion that bees are now as perfect as they were in the beginning. Such a conclusion involves a very nice distinction as to what is meant by "perfect." Surely, the writer could not have meant precisely what large numbers of people might think him to mean, namely, that bees have now the same form, and do the same things in exactly the same way as they did at first, rather than that when bees were created they were created perfect in accordance with the conditions that would surround them, and that as they were in perfect accord with their surrounding conditions then, so they are now in accord with present conditions. But conditions have greatly changed, and consequently so must have the bees.

When one tries to change the form or the honey-producing qualities of bees, or the prolificness of queens, or do what we ordinarily call "improving our stock," we change the conditions under which the bees generally live. Rev. Templin mentioned how Mr. Darwin changed the form of his pigeons and produced new breeds. Mr. Darwin, by selecting out some pigeons for breeding together and rejecting others, made a new condition that had the effect of making a new breed. The breeding of pigeons, of chickens, of cats, dogs, horses, sheep, hogs and cattle, to obtain a better quality or kind of stock; the selection of seed corn, of seed oats or wheat having certain characters that are thought to be the best for the purposes in view, is more or less familiar to every one.

If any one has doubted that bees or insects can be changed in form, or in disposition, or improved, it must be because the person has not observed closely enough, and has consequently always thought of these small creatures always the same, each bee exactly like every other—of course forgetting the old saying that there are no two things alike under the sun. Really, the creatures have been too small for him—beneath his notice. But observant bee-keepers, those that love their bees, and are to be found working over and about or among them at every spare moment, or to the neglect of other work, as already mentioned, have found differences between bee and bee, and hive and hive. Beyond a doubt, many differences not found by them can be found by one properly trained in powers of observation, and with proper aids to his five senses, who looks for variations.

Some of our common flowers have only five petals, so far as the most of us know, but some scientists have looked into the matter and have found that once in a while one can find a flower with six petals. All of us are aware that four and five leaved clovers can be found in white clover, and less often in red clover.

In the Scientific American, or in the Scientific American Supplement, last spring there was an account of a scientist having produced monsters in moths, by grafting pieces of the pupae of several moths together and holding them in place with paraffine, very much as one does the bark in grafting trees. One of the illustrations showed a moth with two bodies.

The Chinese make monster gold fish by performing certain surgical operations upon them when they are very young. Certain scientists have made monster animals develop under peculiar conditions.

It seems, then, that those who know how to go about the work can do much more with animals than most people suppose, and it looks very probable, therefore, that the proper person could produce new races of bees that might be much better than those we have at present.

The lengthening of the tongues mentioned by Rev. Templin is a case in point. Certainly if the stores of honey that from a human standpoint now go to waste every year in the corollas of red clover and other flowers with long clovers could be added to the stores that are obtained from the bees from other sources, there would be a gain for the bee-keeper. So there would also, if, as suggested by Mr. Getaz, bees were larger and could carry larger loads. Many other points might be brought forth, in many of which the scientists would be deeply interested. There is then no doubt that bees can be improved by those that know how and have the opportunity, or that such improvement is desired.

The question is, How to go about the work. Mr. Getaz informs us that we cannot, like the breeders of cattle and horses, make note of the points of bees and keep them re-

corded in a book. Here I think he makes a mistake, and that there is not an animal living, large or small, that cannot have its qualities good, bad, or indifferent, written down on paper. True, the workers do not lay the eggs that keep the colony alive. But whatever qualities they may have can be charged up to the queen. The real difficulty is the time that would be necessary to obtain small results. But time is required in the breeding of all animals, and it is not probable that any one can be found who regrets the time spent in breeding up our best Jerseys, Durhams, our Percherons, Clydesdales, our Chester Whites, Poland Chinas, Essex, or Berkshire, our South-downs, or our Merinos, or our Plymouth Rocks, or White Leghorns. All of these were once nothing more than ordinary wild animals.

There is also the item of expense, if a single bee-keeper should undertake all the improvements that might be made. To a considerable extent he would be obliged to sacrifice profit from annual crops of honey and wax, or colonies of bees, for improvements the good results of which he might not be able to realize for some 20 years, or perhaps he might be obliged to pass some of them on to his children, and never realize them himself at all.

If the single bee-keeper is not likely to undertake the work of improvement, who will? If the improvements are wanted, as all improvements are, and the necessary time and consequent expense makes it practically impossible for the individual bee-keeper to undertake it, who can?

District of Columbia.



Marketing Honey—Some Excellent Advice.

BY A. E. HOSHAL.

The first requisite in the marketing of extracted honey for table use is quality. Nothing but an absolutely first-class article should ever be placed upon the market for this purpose. Good extracted honey will cultivate a taste and sustain a demand for itself, while that which is a little off in quality will destroy such a taste, and consequently with it the demand for extracted honey. A bee-keeper who may happen to have some off-grade extracted honey on hand would better use it for stimulative or winter feeding, make vinegar of it, sell it for manufacturing purposes, or, if the worst must be done, throw it away, rather than place it upon the market for table use. And so long as bee-keepers persist in extracting their honey before it is well capped and thoroughly ripened on the hive, just so long will they have some of this kind of article to dispose of.

Comb honey in sections should never be marketed in the cases in which it was stored by the bees, but should be removed from these, the sections scraped clean of propolis, and, unlike extracted honey, graded into about three grades. Each grade should be crated by itself in new, clean, fresh-looking shipping-cases, and the honey which is seen through the glass in the side of each crate should be a fair sample of that within. These cases can be obtained from any apian supply-dealer, and those holding 12 sections each usually take the best on the market.

For marketing extracted honey in bulk, we have nothing better than the 60-pound square tin can encased in wood. With these, extracted honey can be shipped anywhere with safety, and is in convenient shape. For retail purposes neat packages holding 1, 2, 3, 5 or 10 pounds would be required. If the honey be peddled or sold at home, a 5 or 10 pound tin pail will be much in demand, but if placed in a grocery or other store, packages holding 1, 2 or 3 pounds will sell decidedly the best.

I know of no article where cleanliness, neatness and taste count for more in marketing than with honey. Let it once get daubed about, or on the outside of the package, and it is a sticky mess, attracting flies and other insects, and retaining whatever dust or dirt comes in contact with it, making of it the repulsive rather than the attractive sweet of nature. Comb honey which may have become daubed should be returned to the bees for a half hour or so to be cleaned up again. All shipping-cases for comb honey should have their bottoms covered on the inside with a loose paper, the edges being turned up about $\frac{1}{2}$ of an inch, so as to form a kind of shallow paper tray, and in this tray small cleats so placed as to support the sections when placed in the crate. The paper trays will catch all drippings from the honey, and prevent it getting outside of the case, while the cleats supporting the sections will prevent them becoming daubed, as they otherwise would if allowed to rest on the bottoms of these trays.

It is best, usually, that extracted honey reach the consumer in liquid form; also, in placing it in grocery or other stores for the retail trade it should be in such packages that it will be impossible for it to spill or slop out, even tho it

should be turned upside down. Each package should have upon it full directions for liquefying the honey it contains should it granulate in the consumer's hands; also be neatly and tastefully labeled, and bearing the bee-keeper's name and address.

Be willing to pay a fair wage to those who will undertake to sell for you, and don't expect them to be able to sell your honey at a higher price than what you can yourself, unless they have a better article. Possibly the best way to arrange all this—and it is done and recognized in about all kinds of commerce—is to fix the selling price, and then allow a certain percentage off to the trade, or those who sell our goods for us. If a grocer or other merchant will undertake to handle your honey then don't go and retail to those who might otherwise become his customers, nor peddle it throughout his market field at the same price which you charged him for it. This would be refusing to pay an honest wage to those who work for you, besides cutting the price of honey and doing much to drive your own product out of the market. Yet, how many bee-keepers there are who do not recognize this.—Farmer's Advocate.

"Profitable Bee-Keeping, with Hints to Beginners"—the nine articles by Mr. C. N. White, of England, begin this week in the Bee Journal, as we have received the first two of the nine. See page 426 of this number for further information concerning these articles, and also the premium offers for getting new subscribers for the last six months of 1898.

We would like to have all our readers, if possible, get and send in the subscriptions of their neighbor bee-keepers. The way to get rid of slipshod, old-fogy bee-keepers is to place under them the jack-screw of good bee-literature and raise them up to the level of those who are striving to keep bees in the modern and proper way. By so doing all will be helped.

Many of our subscribers have already sent in new subscribers on the offers made on page 426, but there is room for many more. Before Aug. 1 we hope to add 1,000 new subscribers to our list. It can be done if every one will do only half as well as some others have already done.

Send for free sample copies to work with, or send us the names of non-subscribers, and we will mail the sample copies to them.

Bee-Keeping for Beginners is the title of a 110-page book just out, from the pen of that expert bee-keeper of the South, Dr. J. P. H. Brown, of Georgia. It claims to be "a practical and condensed treatise on the honey-bee, giving the best modes of management in order to secure the most profit." Price of the book, postpaid, 50 cents. Or, we will club it with the Bee Journal for one year—both together for \$1.40; or, we will mail it as a premium to any of our present subscribers for sending us one new subscriber to the Bee Journal for a year (at \$1.00), and 10 cents extra.

The Wood Binder for holding a year's numbers of American Bee Journal, we propose to mail, postpaid, to every subscriber who sends to us 20 cents. It is a very simple arrangement. Full printed directions accompany each Binder. Every reader should get it, and preserve the copies of the Bee Journal as fast as they are received. They are invaluable for reference, and at the low price of the Binder you can afford to get it yearly.

The Alsike Clover Leaflet consists of 2 pages, with illustrations, showing the value of Alsike clover, and telling how to grow it. This Leaflet is just the thing to hand to every farmer in your neighborhood. Send to the Bee Journal office for a quantity of them, and see that they are distributed where they will do the most good. Prices, postpaid, are as follows: 50 for 20 cents; 100 for 35 cents; or 200 for 60 cents.

Langstroth on the Honey-Bee, revised by The Dadants, is a standard, reliable and thoroughly complete work on bee-culture. It contains 520 pages, and is bound elegantly. Every reader of the American Bee Journal should have a copy of this book, as it answers hundreds of questions that arise about bees. We mail it for \$1.25, or club it with the Bee Journal for a year—both together for only \$2.00.

Every Present Subscriber of the Bee Journal should be an agent for it, and get all other bee-keepers possible to subscribe for it. See premium offers on page 426.

QUESTIONS AND ANSWERS

CONDUCTED BY

DR. C. C. MILLER, MARENGO, ILL.

[Questions may be mailed to the Bee Journal, or to Dr. Miller direct.]

Difference in Queen-Progeny—Swarming.

In reply to Geo. H. Stipp (page 397,) I don't know why it is that the queen progeny of a pure queen differs so much from the mother and from each other; I only know the fact. Some pure imported queens are very dark, and their queen progeny will be varied, altho they all will be uniform as to their worker progeny.

Mr. Stipp is right in thinking a young queen may swarm in her first year, when reared in the same hive. Such cases occur by the thousand. But they are virgin queens, and Mr. Gravenhorst was probably talking about laying queens. If a colony rears a young queen on its own account, and that queen swarms after commencing to lay, it will be a very notable exception to the rule.

C. C. MILLER.

Trying to Keep Down Swarming.

I am running for comb honey. Now, if I should keep three or four supers of sections on my hives, giving them an abundance of room, would they be so apt to swarm? Would they fill the sections as nicely as they would if they were more crowded?

Two of the nuclei I bought last year (1897) did not swarm last year, and they are just rolling in the honey, and if I can keep them from swarming I am sure they will give me surprising results.

CENTRAL WISCONSIN.

ANSWER.—No amount of super room will make sure work in keeping down swarming. Pile them up 10 high, and your bees will be likely to swarm. But plenty of super room will do something toward prevention of swarming. A colony crowded for want of enough super room may be forced into swarming that otherwise would not have thought of swarming so soon, if indeed it would have swarmed at all. So it may do a good deal to prevent swarming if you have three or four supers on at a time. But it's running a good bit of risk. If the season should suddenly close, there you would be, with three or four supers full of unfinished sections, when if you had been satisfied with one or two supers less on a hive, you might have had nearly all finish. Sometimes, however, it may be well to run some risk. Last year I did it, and it came out all right, but it made the cold chills run down my back sometimes when the question came to my mind, "What if the flow should suddenly stop and the 15,000 pounds of honey or more, scattered among the sections, should be left unsealed?" So, unless there's a big flood of honey coming, with every appearance of continuing, don't take too much risk.

Raise up your hives by putting a block under each corner; ¼-inch to an inch will be none too high to block up.

Section-Holders and T Supers.

1. I use the section-holder and one-pound section. I find that between the first section-holder and the side of the super there is not space enough for a good bee-passage. How shall I manage to secure the necessary space?

2. When using full-width wood-separators, the upper edge of the separator comes up even with the tops of the sections and divides the passage between the sections, practically closing the spaces. How can I tier up with such arrangement?

3. I have only 20 supers. What will have to be done to them to change them from the section-holder super to the T super?

4. What do you think of tin separators if made from perforated tin and zinc? And what would be the probable cost per hundred?

ARKANSAS.

ANSWERS.—1. There is probably no good way to make the passage greater; but are you sure it's a matter of any importance? A sixth of an inch is all the passage needed, and the bees will go up in the next passage if they can't get up at the side.

2. If your section-holders and supers are made the usual way, the super is deeper by a bee-space than the depth of sep-

arators and sections, making a full bee-space between the contents of one super and the next one above it, in which case there is no difficulty about tiering up.

3. Plane down the super so as to be $4\frac{1}{2}$ inches deep. Put a board inside at one end so as to make the inside length 17 $\frac{1}{2}$, and nail on this a strip of tin, the same as at the other end. Drive in at the proper places the six staples of the particular kind used for supporting the T tins.

4. That's a thing that seems naturally to suggest itself to a great many, but I don't know of any one who has continued using anything of the kind, and it's doubtful if you'll like it. Cost, probably \$3.00 or \$4.00 a hundred.

Wintering—Sun and Shade, Etc.

1. Which is the better way for wintering out-doors, a 2-story 8-frame hive, or a single-story 8 or 10-frame hive? If wintered in a 2-story 8-frame hive, is there not too much room? And if it is the better way, will the bees commence to rear brood earlier than in a single-story hive? Are there any other reasons?

2. Is it best to leave the bees packed summer and winter in chaff-hives or winter-cases?

3. Does it make any difference for brood-rearing if the cells are $\frac{1}{4}$ of an inch longer than they need be?

4. Is it better if the hives get the sun at morning and night, than if they stand always in the shade?

5. Will the bees winter well in a 2-story hive of five or six frames each?

WISCONSIN.

ANSWERS.—1. If a colony is strong, there is probably an advantage in having the two stories, and possibly even if it is weak. I don't know that they'll commence rearing brood any earlier in the double story, but they are a little more remote from the outside air in the upper story, and if they are strong enough they will need some of the room in the lower story for stores and brood.

2. It is probably best to remove winter-cases. Chaff-hives are left the same winter and summer, as they cannot well be changed.

3. The bees will cut the cells down to the proper depth, but of course it makes just so much extra work.

4. It is probably better.

5. Yes; but if a colony is very strong it would be better to have larger hives.

Preparing Bees for Winter—After-Swarms, Etc.

1. I live on the northern shore of Lake Ontario; the mercury frequently falls anywhere from 20° to 30° below zero, and we have a great deal of north wind. Would it not be a good plan to line the winter case for single-wall hive with building-paper, filling the space between the paper and the winter-case with chaff?

2. Which would be warmer, to leave the summer cover on the hive, or chaff-cushion? and will I need to remove some frames and put in chaff division-boards?

3. Would it be best to have all hives face the south, in this locality, or will it make no difference?

4. Would you contract the entrance in winter, or leave full width?

5. When you transfer from box-hives by placing a new one filled with foundation over it, do you close the entrance of the old hive? and would the bees work up through a couple of small holes, perhaps two or three inches long, or would I have to remove the top of the old hive?

6. Can I unite several small after-swarms until I have one good, strong colony, by shaking some of the bees from the frames, with the new swarm, and allowing all to run in together?

7. Has the A. I. Root Company a branch office in Canada?

NEW YORK.

ANSWERS.—1. It would probably be a good thing.

2. The chaff-cushion is likely best on top, but it's hardly necessary to take out any frames to replace with cushion.

3. It isn't likely there's much difference, some favoring one direction and some another.

4. Leave open full width.

5. Transferring by putting the empty hive over isn't much practiced, and you might not like the plan so well as to drum out 21 days after swarming. If you have only small holes for the bees to go up, the queen would be a long time going up, and she might not go up at all, but they might be drummed up, and if there was a frame of brood above they would stay there. In any case it would be a big help to put

a frame of brood in the new hive. If the bottom of the old hive is not nailed on, you can turn it upside down and set the new hive over it. It will be at least as well if the entrance is only to the new hive.

6. Yes, and it will be much better than to have a lot of weaklings. But why not prevent all after-swarms in the way already directed several times? Set the swarm on the place of the old colony, putting the old colony close beside it, and a week later move the old colony to a new location. That's better than to have the trouble of hiving after-swarms and then uniting them. 7. No.

Pollen in Sections—Other Questions.

1. How can bees be prevented from putting pollen in the sections, if at all? Will a greater number of frames in the brood-chamber help to prevent this?

2. Will bees store honey enough in an 8-frame hive to winter out-doors, with protection?

3. Can I use Hoffman frames in two Ideal supers, for extracted honey?

4. How much more extracted than comb honey will a colony produce, provided they have comb built for extracted honey, and are allowed to cap it? Authorities differ.

ILLINOIS.

ANSWERS.—1. I don't know. Sometimes bees put pollen in sections when there seems to be no special reason for it. I suspect they are more likely to do so if the sections are very close to the brood-combs. Yes, it is quite possible that plenty of room in the brood-chamber may make a difference.

2. Sometimes, and sometimes not. It may happen that the room is so largely taken up with brood when sections are taken off that very little honey is in the brood-chamber, and if no late honey comes in the bees may starve.

3. They would be quite too deep.

4. I'm very much like the authorities—I differ too. And seasons and conditions differ. In my locality I don't think there is such a great difference, while in Nebraska some say they can get three times as much extracted as comb, where heart's-ease abounds.

Why Don't they Swarm?—Opening Hives.

1. I have a colony of bees that I put into a new hive. I clipped the queen's wing and she went to work all right for a few days, and she has young bees in the combs. Now I can hardly keep her in the hive. What can I do?

2. I have four other good colonies, and they have not swarmed yet. What is the matter with them?

3. How often can I look into the hives without doing any damage to the bees?

IND. TER.

ANSWERS.—1. You don't say whether the queen leaves the hive alone or with the bees as a swarm. If she leaves it alone, it's a crazy streak, and the only thing you can probably do is to confine her with perforated zinc. If she leaves with a swarm, then the case is to be treated as any case of swarming bees. If the queen was regularly reared in the hive, according to all rules she ought not to swarm this year.

2. That's a good deal like saying, "My neighbor is sick; what's the matter with him?" It is possible that they have all the room needed for a brood-nest, and on that account have no desire to swarm, for no matter how strong a colony may be, it is not likely to swarm if all the right sort of room is present. Again, it may be that forage is not plenty enough to warrant swarming.

3. Probably if you should open a hive for a short time every day when warm enough, you might not notice any particular harm from it, yet every time a hive is opened it must hinder somewhat. Better not disturb the bees unless there is some fair reason for it.

Bee-Space Above Frames and Sections.

Is it necessary, to insure the best results, to have a bee-space above the frames and sections?

TORONTO.

ANSWER.—The bees will do just as good work without the bee-space, but if you try both ways you will probably decide that you want the bee-space for other reasons. If there is no bee-space you are likely to kill a lot of bees every time you set the sections over the frames, and with the bee-space there is not the same gluing.

See "Bee-Keeper's Guide" offer on page 415.



GEORGE W. YORK, EDITOR.

PUBLISHED WEEKLY BY
GEORGE W. YORK & COMPANY
 118 Michigan Street, CHICAGO, ILL.

[Entered at the Post-Office at Chicago as Second-Class Mail Matter.]

UNITED STATES BEE-KEEPERS' UNION

Organized to advance the pursuit of Apiculture; to promote the interests of bee-keepers; to protect its members; to prevent the adulteration of honey; and to prosecute the dishonest honey-commission men.

Membership Fee—\$1.00 per Annum.

EXECUTIVE COMMITTEE—Pres., George W. York; Vice-Pres., W. Z. Hutchinson; Secretary, Dr. A. B. Mason, Station B, Toledo, Ohio.

BOARD OF DIRECTORS—E. R. Root; E. Whitcomb; E. T. Abbott; C. P. Dadant; W. Z. Hutchinson; Dr. C. C. Miller.

GENERAL MANAGER AND TREASURER—Eugene Secor, Forest City, Iowa.

VOL. 38.

JULY 7, 1898.

NO. 27.



NOTE.—The American Bee Journal adopts the Orthography of the following Rule, recommended by the joint action of the American Philological Association and the Philological Society of England:—Change "d" or "ed" final to "t" when so pronounced, except when the "e" affects a preceding sound.

Omaha the Place.—We have received the following from Dr. A. B. Mason, Secretary of the United States Bee-Keepers' Union, which fixes the place of the National convention for 1898 at Omaha, Nebr.:

EDITOR OF AMERICAN BEE JOURNAL:—Please say in the next issue of your journal that after thoroughly considering the matter of the place for holding the next convention of the United States Bee-Keepers' Union, the Executive Committee has decided in favor of holding it at Omaha, Nebr. The exact date for holding the convention will be fixed by Mr. E. Whitcomb, upon whose broad shoulders will be put the pleasure of securing reduced railroad and hotel rates, and a place for the convention to meet, etc. His shoulders are broad, and he is right on the ground.

A short time since Mr. Whitcomb sent me some particulars regarding rates from which I take the following:

"Every day during the Exposition tickets will be on sale from all Western Passenger Association territory to Omaha at one and one-third fare for the round trip, except their rates from the following points, which will be as follows: Chicago, \$20; Peoria, \$17; St. Louis, \$17; Denver, \$25. Tickets will be limited to return 30 days from date of sale, not to exceed Nov. 15. From June 1 to Oct. 15 the passenger rates to Omaha from all the principal cities and towns in the United States beyond the Western Passenger Association territory will be 80 per cent. of double the first-class fare. Tickets will be good to return until Nov. 15."

But I'm expecting (?) lower rates, for Mr. Whitcomb told the convention at Buffalo last summer, that if the Union would hold its next convention at Omaha during the time of holding the Trans-Mississippi Exposition, we should have "as low rates as to any place on earth."

We know that Mr. Whitcomb will do "his level best" for the comfort of those who attend the convention, and show us "the sights" on the Exposition grounds.

A prominent Western bee-keeper wrote me a few days

since that "the rate, however, cuts but a very small figure." If we poor bee-keepers were all rich like him it wouldn't, but this is only another evidence of the old saying, that localities differ.

It is probable that the convention will be held during the first part of October, and further notice of rates and time of meeting will be given when known. A. B. Mason, Sec.
 Sta. B, Toledo, Ohio, June 30.

Now that the place of meeting is settled upon, let all begin to make arrangements to be there, trying, if possible, to have even a larger attendance than at the World's Fair convention. Dr. Miller, who was then president, said that convention was too big for him to properly preside over. Now, the one whose duty it is to preside at Omaha is not one-tenth as big a man as Dr. Miller, and has to say "I don't know" ever so many more times than he does, and yet the present president hopes that there will be at least twice as many in attendance at Omaha as at the World's Fair convention. Not that he is a more capable presiding officer than Dr. Miller, but he would like the privilege of looking into the faces of 500 or 1,000 bee-keepers at one gathering. And when he can't handle the presiding part, he will call on several ex-presidents to help.

All can expect that the Secretary, Dr. Mason, will provide a great program. He knows how.

Southern California.—Prof. Cook has sent us the following paragraphs, dated June 23, from Los Angeles county:

We notice that some of the red-gums are just now coming into bloom. In the early morning these trees are noisy with the hum of bees, as they are beautiful with their clusters of bloom. We notice, also, that the peppers are crowded with bees all the day long.

Even here at my home the bees are getting considerable honey, despite the unprecedented drouth. I lookt in some hives a few days since, where the single tier of supers were well filled with fine honey, nearly all capt. It is to be said, however, that few localities in southern California secured as much rain as did this place the past season.

About Ramona and Julian—noted for their fine apples—in San Diego county were exceptions in all southern California this season. Each had copious rains, more than was needed. Thus in these localities bees are doing wonderfully well, and crops are exceptionally good. Our friend Taylor, ever alert for the worm, caught him in going to these favored regions with his bees, and is securing, as we learn, a fine crop of honey. A. J. Cook.

The Home Market for Honey.—Mr. F. L. Thompson, on page 419 of this number of the Bee Journal, gives a very interesting experience in attempting to sell honey in the home market. All are not cut out for salesmen, and evidently Mr. T. belongs to that number, tho he gave it a thorough trial, and is to be commended for the plucky way in which he did it.

Of course, selling honey from house to house is not a rapid way to acquire riches. Many can make four times as much at something else. But there are doubtless bee-keepers without number who can do well at selling their honey crop themselves in surrounding towns. Surely, there are many who would have done better, last year, had they disposed of their honey near home, rather than ship it to a distant overcrowded city market and take what the dealer was able to realize for them.

This question of profitably disposing of the honey crop is one that must ever be of great interest to the producers. Upon it depends their success more than upon any other one thing—aside from nectar in the flowers. But after the crop is secured, unless it finds a remunerative market, only loss and discouragement can result.

We have much faith in Mr. Thompson's suggestion of co-operation among bee-keepers. We believe that if a number of bee-keepers would combine in the marketing of their crops,

a much better net result could be secured. Each city should have in it, from Sept. 1 until April 1, a honey depot in charge of an able bee-keeper or two, whose business it should be to see that the retail groceries are supplied with honey, and that only pure honey is put on the market. The bee-keepers should in a way control the market—have a monopoly in the honey line, if you wish to call it that—and wholesale to the grocers all the honey that is sold in the town where they have their headquarters, so far as is possible for them to do.

We should like to see this plan tried first in a town of say 10,000 population. A city like Chicago would be almost too large to begin on.

Ship Surrendered to Bees.—This was not one of Dewey's or Sampson's squadron—theirs is not of the surrendering kind. A newspaper correspondent in Tacoma, Wash., reported that the bark Shirley, which has carried millions of feet of lumber on that coast, is now said to have aboard a small cargo of honey. Her owners recently decided to put her in the Klondike service, and Mr. L. B. Mitchell was sent to Quartermaster Harbor with men to get her ready for repairs. Mr. Mitchell says:

"We found that she had been taken possession of by honey-bees, and in going into her we found every passage and room was apparently full of bees. We shut the hatchway and thought we had them imprisoned, but we found a steady stream going and coming through the hole left for a stove-pipe in the cabin. We were on board 30 minutes, and in that time the column of bees continued to move, making a noise like escaping steam. We were unable to work on board until something should be done. We lowered into the hull a plank of burning cedar bark, and closed up everything. A great many of the bees were killed, but we were unable to go into the bark the next day. Some think she may contain a ton of honey, or even more."

Bees at the North Pole.—The man who gleans the "Stray Straws" for Gleanings—why not call him the "Straw-carrier?"—finds in Le Rucher Belge that "the explorer Ejrind Asrup found many bees in latitude 83° north. He thinks they may be at the North Pole, as the remaining 7° would make no great change in flora. There's only three months summer; but as the sun doesn't set in that time it's as good as six months here, and plants develop with astonishing rapidity and vigor, and the flora is of extreme richness."

We wonder if some enterprising bee-supply dealer won't establish a branch house next door to the North Pole now. Talk about hardy bees—why not get a few queens from that semi-sunless land. They ought to be tough enough to extract sweetness from the "snow-ball" bush!

Honey as Food is a neat little 24-page pamphlet especially gotten up with a view to creating a demand for honey among should-be consumers. The forepart of the pamphlet was written by Dr. C. C. Miller, and is devoted to general information concerning honey. The latter part consists of recipes for use in cooking and as a medicine. It will be found to be a very effective helper in working up a home market for honey. We furnish them, postpaid, at these prices: A sample for a stamp; 25 copies for 30 cents; 50 for 50 cents; 100 for \$1.00; 250 for \$2.00; 500 for \$3.50. For 25 cents extra we will print your name and address on the front page, when ordering 100 or more copies at these prices.

The Names and Addresses of all your bee-friends, who are not now taking the Bee Journal, are wanted at this office. Send them in, please, when sample copies will be mailed to them. Then you can secure their subscriptions, and earn some of the premiums we are offering. The next few months will be just the time to easily get new subscribers. Try it earnestly, at least.



HON. EUGENE SECOR, of Winnebago Co., Iowa, reported as follows, June 27:

"Basswood will open in about a week. But little honey has been stored so far."

MR. A. W. SMITH, of Sullivan Co., N. Y., wrote us June 23:

"The weather has been too wet and cold for the bees to get a large crop of white honey here."

REV. H. H. FLICK, of Lycoming Co., Pa., wrote us June 24:

"It is a poor season for bees here so far—cold and rainy, tho the weather is good to-day. We hope for a better honey-flow."

DR. A. B. MASON, of Lucas Co., Ohio, writing us June 30, reported:

"Sweet clover began blossoming a week ago, and the bees are quite busy. I've been so busy for a few days that I haven't lookt to see what the bees are accomplishing in honey yielding."

PROF. A. J. COOK, of Los Angeles Co., Calif., wrote us June 24:

"We have vacation now, and I am going to rest, as I need it. I shall work at institutes. Shall hold two in the region of Ramona, and hope to see bees and honey booming."

Prof. Cook is a very active man, and evidently does not believe in trying to rust out in the sunny clime of California. The world needs the busy workers—both men and bees.

HON. R. L. TAYLOR, in the Review, seems to have started in to reform the grammar used by some of the correspondents of bee-papers, and also that of the editors thereof. He will have a large job—and likely his trouble for his pains; and, judging from some of his "criticisms" so far, a lot of painful trouble (to him). We are perfectly willing that he shall waste all the space the Review will allow him, in trying to reform the language printed in the American Bee Journal. But lest he forget, and devote more time to criticising the literary than the aparian part of this journal, we will say that this is neither a grammar nor a rhetoric, but a paper devoted to telling in a simple, plain way how to keep bees.

By the way, as a criticism on Mr. Taylor's writing for the Review, we wish to say that we do not authorize the use of the letters "A. B. J." for "American Bee Journal" in public print. As we are the highest authority on this particular case, we would suggest that Mr. Taylor either discontinue referring to this paper as "A. B. J.," or else be consistent and use "A. B. K." for "American Bee-Keeper," "B. K. R." for "Bee-Keepers' Review," etc.



The Largest Apiary in England is claimed to be that of T. B. Blow & Co., at Welwyn, Herts, consisting of more than 200 colonies.—British Bee Journal.

Age of Hives.—I have hives that I made more than 30 years ago that have never needed repairs, except a second coat of paint.—C. Dadant, in Revue Internationale.

Wintering Without Pollen.—Gilbert Wintle had nine colonies of bees given him late in September—just the bees with no stores. He put the nine lots in three hives, either on foundation or empty combs, and fed up with sugar syrup.

They came through in fine condition, and he thinks it good proof that bees have no need of pollen for wintering, as the latter part of September was too late for gathering pollen.—Canadian Bee Journal.

The Yield of a Linden Tree is equal to that of a whole acre of buckwheat, according to A. Sonsledsky, in Revue Internationale. Would York State men agree to that?

Improvement in Extractors.—Rambler, in Gleanings, has continued after a long vacation his series of rambles. He mentions an improvement in G. W. Brodbeck's extractor. There is a deep receptacle at the end for the wax and honey to collect, and this saves the honey from being so much colored by the heat.

The Mosquito-Hawk and Bees.—This insect, which is also called dragon-fly and darning-needle, has been accused of destroying bees. A. J. Wright says, in Gleanings, that whatever it may be in other localities, he considers it a friend. In the day-time it makes havoc among gnats and mosquitoes, and at night it devours bee-moths.

Honey-Vinegar.—Boil 25 quarts of rain-water with two quarts of honey, skimming frequently for about an hour. When cool put into a 30-quart vessel, and fill full with strong vinegar. Put it in a warm place with the bung open, to ferment for 9 or 10 weeks. If too weak, add strong vinegar. Draw off half to bottle, then fill afresh with honey-water.

Wintering Bees in Cellars.—Henry Alley doesn't believe in keeping the temperature of the cellar continuously as high as 40° to 50°—too much hot-bed plan. His bees were confined from the middle of December till March 9, the temperature varying with the weather. When at zero outside the thermometer stood at 20° inside, and it never went above 45°. His bees came through in fine condition.—Gleanings.

Transferring.—The question being asked in Canadian Bee Journal as to the best time and way to transfer from box hives, all agree upon the time of fruit-bloom except A. D. Allan, who replies as follows:

"Wait till they are strong, nearly ready to swarm. Operate as follows: Reverse the hive and set an empty box on it, drive the bees up, divide about equal, put one part with queen in the new hive on the old stand, the other part put back in the old hive and move to a new stand. In 21 days repeat the operation, only put all the bees in the new hive, set the old hive at the side of your apiary until the bees have removed the honey, then cut out the old combs and put them into the wax-extractor."

Eight or Ten Frames—Which?—Editor Root has been advocating large brood-nests, and a correspondent rather accuses him of inconsistency in advocating 8-frame hives. Mr. Root replies:

"I do not know but I am like Dr. Miller—I don't know which is better—the 8 or 10-frame. I know this: That the 8-frame with single brood-chamber is not nearly large enough. I am pretty well satisfied, also, that the 10-frame is too small. I am not sure that a 12-frame Langstroth brood-nest is large enough. An 8-frame body is plenty heavy enough to lift when it is full of honey; and I am almost inclined to believe that two 8's—that is, 16 frames in all—are none too big for a brood-nest; but 10-frames would be too large. No, I prefer an 8-frame to a 10-frame; and I think I should prefer a 12-frame to a 10-frame; but if a 12-frame is too small, then I should rather have two 8-frames."

Leveling Unfinished Sections.—C. Theilmann gives an interesting bit of history regarding B. Taylor's comb-leveler, in Gleanings. Mr. Taylor opposed the use of drawn combs, but after seeing what beautiful sections Mr. Theilmann got by means of them, he repented, and the next year he brought to the convention his comb-leveler. Mr. Theilmann says the whole secret of getting as nice sections of honey from these drawn combs as from foundation is in getting rid of "the big rim around the cells, which is generally soiled more or less; and if not taken away, the bees will use part of it for capping the honey, which gives it a yellow tint." Editor Root—who has stoutly maintained that it was necessary to reduce the depth of the cells to $\frac{3}{8}$ -inch—now says: "I think we can assume that the whole purpose of leveling, as was once advocated by the late B. Taylor, was to get rid of the thickened, soiled edges of the cells as they are ordinarily left by the bees."

FOR THE READERS OF THE
AMERICAN BEE JOURNAL.

PROFITABLE BEE-KEEPING, —WITH— HINTS TO BEGINNERS.....

By Mr. C. N. White, of England,

Author of "Bees and Bee-Keeping," "Pleasurable Bee-Keeping," etc.

Mr. White is owner of one of the largest apiaries in the country where he lives, and has made a life study of the subject. He is also lecturer, under the Technical Education Scheme, to several County Councils in England. He will treat the subject in a

Series of Nine Illustrated Articles:

- | | | |
|------------------------------|----------------|---------------|
| 1. General and Introductory. | 4. Swarming. | 7. Supering. |
| 2. Bees. | 5. Hives. | 8. Diseases. |
| 3. Handling Bees. | 6. Foundation. | 9. Wintering. |

This will be a series of practical articles that bee-keepers of the United States will not want to miss reading. They are copyrighted by Mr. White, and will appear only in the AMERICAN BEE JOURNAL.

We want our present readers to begin at once to get their neighbor bee-keepers to subscribe for the Bee Journal for the last six months of 1898, and thus read the articles by Mr. White. In order that all may be able to take advantage of this rare opportunity to learn from a successful and practical English authority on bee-keeping, we will send the American Bee Journal for

**The balance of 1898 for only 40 cents—
To a NEW Subscriber—thus making it**

SIX MONTHS FOR ONLY FORTY CENTS—

Which can be sent in stamps or silver. If you are a subscriber already, show the offer to your bee-keeping neighbors, or get their subscriptions, and we will give you, for your trouble, your choice of ONE of the following list, for each NEW 40-cent subscriber you send:

For Sending ONE New 40-cent Subscriber:

- | | |
|---|---|
| 1 Wood Binder for a Year's Bee Journals | 10 Foul Brood—by Dr. Howard |
| 2 Queen-Clipping Device | 11 Silo and Silage—by Prof. Cook |
| 3 Handbook of Health—Dr. Foote | 12 Foul Brood Treatment—by Prof. Cheshire |
| 4 Poultry for Market—Fan. Field | 13 Foul Brood—by A. R. Kohnke |
| 5 Turkeys for Market—Fan. Field | 14 Muth's Practical Hints to Bee-keepers |
| 6 Our Poultry Doctor—Fan. Field | 15 20 "Honey as Food" Pamphlets |
| 7 Capons and Caponizing—Field | 16 Rural Life |
| 8 Kendall's Horse Book | |
| 9 Mullen's Horse Book | |

For Sending TWO New 40-cent Subscribers:

- | | |
|---|---|
| 1 Potato Culture—by T. B. Terry | 7 Hutchinson's "Advanced Bee Culture" |
| 2 Green's Four Books | 8 Dr. Brown's "Bee-Keeping for Beginners" |
| 3 Ropp's Commercial Calculator | 9 Bienen-Kultur—German |
| 4 Dr. Tinker's Bee-Keeping for Profit | 10 Bees and Honey—160 pages—by Newman |
| 5 40 "Honey as Food" Pamphlets | 11 People's Atlas of the World |
| 6 Winter Problem in Bee-Keeping—by Pierce | |

Please remember that all the above premiums are offered **only** to those who are now subscribers, and who will send in new ones. A new subscriber at 40 cents cannot also claim a premium.

Now, let every one go to work, and help roll up the largest list of subscribers the old American Bee Journal ever had. It can easily be done if ALL who possibly can get a few new subscribers will kindly do so.

GEORGE W. YORK & CO.,

118 Michigan Street, CHICAGO, ILL.

Southern Home of the Honey-Bee

Will continue to rear none but the **BEST QUEENS**. Untested, 50 cents; Tested, \$1.00.
GEO. W. HUFSTEDLER, Prop.,
 President of National Queen-Breeders' Union,
 24Atf **Beaville, Texas.**
 Please mention Bee Journal when writing.



Bee-Hives, Sections, Shipping-Cases—everything used by beekeepers. Orders filled promptly. Send for catalog. **MINNESOTA BEE-KEEPERS' SUPPLY MFG. CO.**, Nicollet Island, Minneapolis, Minn.

Please mention Bee Journal when writing.

QUEENS

From the best strains of bees in this Country...

I make the rearing of Queens a specialty. Untested, either 3 or 5-banded, 65 cents each. Tested, 95 cents each. **DANIEL WURTH**, Falmouth, Rush Co., Ind. 24A3t

ITALIAN

—AND—

CARNIOLAN QUEENS, Three or five-banded—Untested, 50c; Tested, 75c. Warranted purely mated. Safe arrival guaranteed. Postoffice Money Orders made payable at Caldwell. Address,

C. B. BANKSTON, Christman, Texas. 24Atf

BEES! Florida Italian QUEENS!

Tested Queens, \$1.00 each; Untested, 50c. Prompt and satisfactory dealing.

Address, **E. L. CARRINGTON**, De Funiak Springs, Fla. 11Atf



GOOD WHEELS

MAKE A GOOD WAGON. Unless a wagon has good wheels it is useless. **THE ELECTRIC STEEL WHEELS** are good wheels. They make a wagon last indefinitely. They are made high or low, any width of tire, to fit any axle. They can't get loose, rot or break down. They last always. Catalog free. **Electric Wheel Co.**, Box 16, Quincy, Ill.



The twist is what makes the Kitzelman Fence famous. With our Duplex Automatic Machine you can make 100 styles and 60 rods per day of the Best Worm Wire Fence on Earth, Five-high, Bull-strong, Pig-tight **FOR 18¢ PER ROD**. Chicken fence 10¢. Rabbit-proof fence 16¢. and a good Hog fence for 12¢ per rod. Plain, Colored Spring and Barbed Wire to farmers at wholesale prices. Catalogues **FREE** for the asking. Address, **KITZELMAN BROTHERS**, Box 138, Ridgeville, Indiana.

45Dtf

Please mention the Bee Journal.



Anyone Interested

in AGRICULTURAL PURSUITS can't afford to be without the **AGRICULTURAL EPITOMIST**.

Sample copy **FREE** to ANY ADDRESS upon receipt of name and address plainly written on postal card naming paper in which you saw this ad. Address **AGRICULTURAL EPITOMIST**, Indianapolis, Indiana.

26E20t Please mention the Bee Journal.

By Return Mail. Queens.

Strictly 5-banded or Golden Beauties. Untested, 50 cents. Tested, \$1.00. 25A8t **TERRAL BROS.**, Lampasas, Texas. Please mention Bee Journal when writing.

For Meeting Baptist Young People's Union,

At Buffalo, N.Y., July 14-17, the Nickel Plate Road will sell tickets at rates lower than via other lines. The accommodations are strictly first-class in every particular, and it will be to your advantage to communicate with the General Agent, 111 Adams Street, Chicago, before purchasing your ticket. Telephone Main 3389. (28)



In the multitude of counsellors there is safety.—Prov. 11-14.

The Queen and Her Mating.

Query 75.—Under favorable conditions—1. How many days will elapse after the queen hatches from the cell before she takes her flight?

2. How many days after hatching before she commences laying?

3. Is it true that the mating of the queen and drone always causes the death of the latter?—Utah.

Emerson T. Abbott—I do not know.

J. A. Stone—1. From 1 to 5. 2. From 8 to 15. 3. Yes.

J. A. Green—1. 6 or 7 days. 2. 10 days. 3. I do not know.

Dr. C. C. Miller—1. 5 days or more. 2. Something like 10. 3. Probably.

Chas. Dadant & Son—1. About 6 days, never short of 5 days. 2. 2 to 4. 3. Yes.

Mrs. J. M. Null—1. 5 to 11 days. 2. 10 to 16 days. 3. Death is a physical necessity.

R. L. Taylor—1. From 4 to 8 days. 2. From 6 to 15. 3. I think so, of necessity.

Dr. J. P. H. Brown—1. Usually in 4 or 5 days. 2. On an average, in 10 days. 3. 'Tis true, I believe.

Prof. A. J. Cook—1. 3 to 6—usually 5, with suitable weather. 2. 3; occasionally 2. 3. Yes.

J. M. Hambaugh—1. From 3 to 7 days. 2. 6 to 10. 3. Yes, according to our best authority.

E. France—1. I don't know. 2. A week to 10 days. 3. I don't know, and don't think any one knows.

O. O. Poppleton—1. From 6 to 9 days usually; but there are many exceptions. 2. Add a couple of days to above figures. 3. I don't know, but think yes.

D. W. Heise—1 and 2. That will vary greatly, depending much upon the weather, and other conditions. 3. I give it up; ask them that know.

W. G. Larrabee—1 and 2. I never saw a queen take her flight, but she will commence laying from 3 days to a week after hatching. 3. I don't know.

J. E. Pond—1. Usually 2 or 3 days. 2. 5 or 6 days. 3. Yes, the drone loses the male organ at the time of mating, and death, as a rule, immediately results.

Mrs. L. Harrison—1 and 2. It will depend upon the weather as to the time of flights and the laying of the queen. 3. I don't know. What is the difference, anyhow, whether he lives or dies?

C. H. Dibbern—1. From 12 to 16 days. 2. I am not sure about this, but I think the time varies somewhat. 3. That is the common understanding, but there may be exceptions.

E. S. Lovesy—1. About 5 days. 2. 8 to 9 days. 3. I would very much like to know. I have many times seen a young queen come out of the hive with the bees, circle in the air, and usually return and enter the hive in about 10

Sweet Clover

And Several Other Clover Seeds.

We have made arrangements so that we can furnish seed of several of the Clovers by freight or express, at the following prices, cash with order:

	5lb	10lb	25lb	50lb
Sweet Clover (white).....	.60	\$1.00	\$2.25	\$4.00
Alsike Clover.....	.70	1.25	3.00	5.75
White Clover.....	.80	1.40	3.00	5.00
Alfalfa Clover.....	.60	1.00	2.25	4.00
Crimson Clover.....	.55	.90	2.00	3.50

Prices subject to market changes.

Add 25 cents to your order, for cartage, if wanted by freight.

Your orders are solicited.

GEORGE W. YORK & Co.

CHICAGO, ILL.

Young Tested Italian Queens For 75c each....

I have a fine lot of them, and can fill orders promptly. Address,

F. F. MORROW, Wallaceburg, Ark. 24Atf Please mention the Bee Journal.

Muth's HONEY-EXTRACTOR Square Glass Jars.

Root's Goods at Root's Prices.

BEE-KEEPERS' SUPPLIES in general, etc etc. Send for our new catalog.

Practical Hints will be mailed for 10c. in stamps. Apply to—

Chas. F. Muth & Son, Cincinnati, Ohio. Please mention Bee Journal when writing.

ITALIAN QUEENS bred for honey-gathering by the best methods, with no black bees in my apiary; mated Queens are rare. Untested, 50c each; 55 doz. After July 1, 45c, or \$4.50 doz. Tested, 75c each or 3 for \$2. Send for circular. Safe arrival.

W. J. FOREHAND, Port Deposit, Ala. 25A8t

Barnes' Foot-Power Machinery.



Read what J. L. PARENT, of CHARLTON, N. Y., says: "We cut with one of your Combined Machines, last winter 50 chaff hives with 7-in. cap, 100 honey-racks, 500 broad frames, 2,000 honey-boxes and a great deal of other work. This winter we have double the amount of bee-hives, etc., to make and we expect to do it with this saw. It will do all you say it will. Catalogue and Price-List

Free. Address, **W. F. & JOHN BARNES**, No. 995 Baby St., Rockford, Ill. 45Ctf

Please mention Bee Journal when writing.

Farm Bee-Keeping.

The only bee-paper in the United States edited exclusively in the interest of the farmer bee-keeper and the beginner is **THE BUSY BEE**, published by—

Emerson T. Abbott, St. Joseph, Mo.

Write for **FREE SAMPLE COPY NOW**.

Please mention Bee Journal when writing.

The American Poultry Journal,

323 DEARBORN ST.,

CHICAGO, ILL.

A Journal that is over a quarter of a century old and is still growing must possess intrinsic merit of its own, and its field must be a valuable one.

Such is the **American Poultry Journal**. 50 cents a year.

Please mention Bee Journal when writing.

July 8

the Nickel Plate Road will run an excursion to Chautauqua Lake, at one fare for the round trip. Write to J. Y. Calahan, 111 Adams Street, Chicago, for particulars. Tel. Main 3389. (39-26-2)

DR. PEIRO,

CENTRAL MUSIC HALL, CHICAGO.

Please mention Bee Journal when writing.

**Queen-Clipping Device Free**

The Monette Queen-Clipping device is a fine thing for use in catching and clipping queens' wings. We mail it for 30 cents; or will send it FREE as a premium for sending us ONE NEW subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device.

GEORGE W. YORK & CO.,
CHICAGO, ILLS.

BEES, HONEY, MONEY

Queens for Business.
Supplies at Bottom Prices.

"Bee-Keeping for Beginners," price 50 cents, imparts the instruction. Price-List free.

J. P. H. BROWN, Augusta, Ga.



OUR PRICES are worth looking at. We are making the new

Champion Chaff-Hive

with dovetailed body and supers, and a full line of other Supplies, and we are selling them CHEAP. A postal sent for a price-list may save you \$\$\$\$

H. H. SCHMIDT & CO.,
Box 187 SHEBOYGAN, WIS.

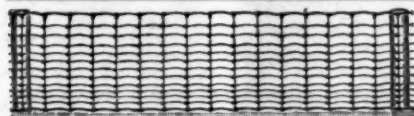
IF YOU WANT THE

BEE-BOOK

That covers the whole Apicultural Field more completely than any other published, send \$1.25 to Prof. A. J. Cook, Claremont, Calif., for his

Bee-Keeper's Guide.

Liberal Discounts to the Trade.

**The New War Bonds**

will float without the aid of a promoter. Full value and kept faith establish a market, as they have done, for Page fence.

PAGE WOVEN WIRE FENCE CO., Adrian, Mich.
Please mention Bee Journal when writing.

The Very Best Queens at the Lowest Prices....

Beautiful Golden Italian Queens bred from the best honey-gathering strain, reared by the best known methods—50 cents each. Select Tested, \$1.00. No black bees here.

W. G. GATHRIGHT,

25A3t DONA ANA, NEW MEX.
Please mention Bee Journal when writing.

First Excursion of the Season to Buffalo

Via Nickel Plate Road, July 14-17, at one fare for the round trip. Choice of water or rail between Cleveland and Buffalo within final limit of ticket. For further information call on or address J. Y. Calahan, General Agent, 111 Adams Street, Chicago. Telephone Main 3389. (31)

minutes. I have seen her settle with the bees as if tired, and I have seen them hived as a swarm, but they always rush out and enter their own hive. But I have never seen anything that would shed any light on this question.

Dr. A. B. Mason—1. The time varies. I have had them fly in 5 days, and also not for 8 days, under the conditions named. 2. From 2 to 4 days. 3. I don't know, but our leading writers say it does.

Eugene Secor—1. Prof. Cook says 5 to 6 days; Cheshire, 6; Cowan, 3 to 5; Langstroth-Dadant, 6 to 7; Root, 5 to 7. 2. Prof. Cook, 2 to 3 days; Cheshire, 2; Cowan, 2; Langstroth-Dadant, 2; Root, 2. 3. I don't know.

P. H. Elwood—1. Cowan says from 3 to 5; Cheshire says 6 days. 2. Cheshire says 2 days. We believe it takes with us nearly 10 days on the average, from hatching to laying. 3. I do not know that it ever causes death, but suppose it is so.

R. C. Alkin—I believe 3 to 4. 2. All favorable, 9; some 8; some 10 to 12. 3. I never saw the mating act, but have seen a number of queens evidently very soon after mating, a string trailing after them $\frac{1}{4}$ to $\frac{1}{2}$ inch long—supposed to be a part of the drone.

Rev. M. Mahlin—1. Usually about 5, if the circumstances are very favorable. 2. Under very favorable circumstances in 7 days, but that is much under the average. 3. I suppose it is. I discovered in my boyhood that the extrusion of the male organs produced instant death.

G. M. Doolittle—1. If the bees allow her to emerge (not hatch; the larvæ hatch) from the cell as soon as mature, from 5 to 7, as a rule. If held in the cell by the bees, then from 24 to 72 hours after allowed her liberty. 2. A queen commences laying about 2 days after successfully meeting the drone. 3. Gently press a "ripe" drone till the sex-organs protrude, and the drone expires at once. See?

G. W. Demaree—1. It depends upon the weather, and to some extent on the time of year. About 18 years ago I spent nearly a whole breeding season to test all these questions, and have observed closely ever since. To put it definitely, she will commence her wedding flights—she makes not less than three—on the evening of the 7th day of her age. 2. She begins to lay in 2 or 3 days. 3. I believe it is.

**Report from an Old Bee-Keeper.**

I have kept bees for 50 years, and have experimented in several ways to get the most honey. Some 14 or 15 years ago I got the Simplicity hive. I have lots of neighbors that are wondering how I get so much nice comb honey. They can't do it with their hives and supers. I got more than 2,000 pounds of as fine comb honey last year as could be wished for, from 14 colonies. My hives are all alike, each super holding 56 sections. I just pile up in the spring say 112 sections at first, in April; in May I put on one more super, and when the bees get

California

If you care to know of its Fruits, Flowers, Climate or Resources, send for a Sample Copy of California's Favorite Paper—

The Pacific Rural Press

The leading Horticultural and Agricultural paper of the Pacific Coast. Published weekly, handsomely illustrated \$2.00 per annum. Sample Copy Free.

PACIFIC RURAL PRESS,
330 Market St., - SAN FRANCISCO, CAL.

PATENT WIRED COMB FOUNDATION

Has No Sag in Brood-Frames

Thin Flat-Bottom Foundation

Has No Fishbone in the Sarpine Honey.

Being the cleanest is usually worked the quickest of any Foundation made

J. A. VAN DEUSEN,

Sole Manufacturer,
Sprout Brook Montgomery Co., N. Y.

Please mention Bee Journal when writing.

FREE FOR A MONTH.

If you are interested in sheep in any way you cannot afford to be without the best and only weekly sheep paper published in the United States.

WOOL MARKETS AND SHEEP

has a hobby which is the sheep breeder and his industry, first foremost and all the time. Are you interested? Write to-day Wool Markets & Sheep, - Chicago

Please mention Bee Journal when writing.

BEE-KEEPERS! Let me send you my 64-page Catalog for 1898

J. M. Jenkins, Wetumpka, Ala.

Please mention Bee Journal when writing

COMB FOUNDATION Wholesale and Retail.

Working Wax into Foundation for CASH A Specialty.

Hives, Sections, and a full line of Supplies. The best of everything. Write for Catalog, with prices, and samples of Foundation and Sections.

BEESWAX always wanted for cash or trade.

GUS DITTMER,
AUGUSTA, WIS.

Please mention Bee Journal when writing.

PAID FOR Cash Beeswax

For all the Good, Pure Yellow Beeswax delivered to our office till further notice, we will pay 25 cents per pound, CASH. No commission. Now if you want cash, promptly, for your Beeswax, send it on at once. Impure wax not taken at any price. Address as follows, very plainly,

GEO. W. YORK & CO.
118 Michigan st., CHICAGO, ILL.

Texas Queens

Best honey-gathering strain in America. Tested, \$1.50. Untested, \$1.00. Write for a Circular. J. D. GIVENS, Lisbon, Tex. 7A26t Please mention the Bee Journal.

ITALIAN BEES AND QUEENS FOR SALE...

Queens, \$1.00; after August, 50 cents. Mrs. A. A. SIMPSON, Swarts, Pa. 27A8t Please mention Bee Journal when writing.

to work on it I put on one more, so I give all the room they can fill, and keep ahead of them all summer. I got from 200 pounds down to 56 from them last year, according to the size of colony. Last year I got from 50 to 100 pounds each from the new swarms, all from natural swarming. Give me natural swarming, by all means. I now have 24 good colonies, with over 2,800 sections on them. I have lost two swarms.

E. D. BACON.

Shelby Co., Ill., June 25.

Very Little Honey So Far.

Bees are strong, but no swarms, and very little honey yet, tho plenty of bloom. Red clover seems to be the only thing that will furnish honey, but the bloom is so deep that it is hard for the bees to work.

ALBERT HOLLADAY.

Clinton Co., Ind., June 22.

Threatened with Foul Brood.

My 27 colonies are in fine condition at present, but as foul brood has gotten into an apiary $3\frac{1}{2}$ miles south of here, it is hard to tell how things will come out.

Is there any law in Michigan to compel the apiarist to try to get rid of the disease? The disease was brought about through his carelessness.

I. D. BARTLETT.

Charlevoix Co., Mich., June 27.

[Yes, Michigan has an old law on foul brood, which was published in the Bee Journal last year. Some suggestion was made at the last Michigan State convention looking toward its revision, we believe.—EDITOR.]

Wet Spring, Sweet Clover, Etc.

I had intended to send a few apiarian notes some time before this, but the weather was so very hard on the bees that it took all my spare time to give them a little courage and consolation in order to keep them from deserting their hives. The spring was very wet, and bees could not make a living in this part of the country before the first of June; since then they have been working on white and Alsike clover enough to breed up well. However, they are now ready for that flow we long have waited for, but it has not yet appeared.

My experience with sweet clover is just opposite to some that are having a world of trouble trying to get rid of that "notorious weed." The spring of 1896 I got some seed from a reliable source, sowed some of it on wheat ground, the same as red clover seed, and the rest I scattered around in fence corners, on good ground, where I was sure it would grow. Of that lot of seed I found one small plant. I staked it up so nothing could hurt it, and the second year it grew to about 14 inches in height and bloomed some, but I never saw a single bee near it. That stalk was in a fence-corner in the best of soil. This spring there is not a plant to be found in that vicinity.

Last spring I gave it another trial, sowing some with oats on good, mellow ground; some along a spring run (on its banks, where there was washt ground,) but so far I have been unable to find a single plant, and I came to the conclusion that I could get along very well without sweet clover.

I had a very curious experience with a

Be It Known

To all Men, we are prepared to fill orders promptly for

CHOICE QUEENS

of the best strains of Golden or Leather-Colored Italians.... Tested \$1.00; Untested—one, 75c; three, \$1.50. After July 1, 50c each. Remit by Express Money Order, payable at Barnum, Wis. One and two-cent stamps taken. Address.

Van Allen & Williams,
25 Atf BARNUM, WIS.



ONE MAN WITH THE UNION COMBINATION SAW

Can do the work of four men using hand tools, in Ripping, Cutting-off, Milling, Rabbeting, Grooving, Gaining, Dadoing, Edging-up, Jointing Stuff, etc. Full Line of Foot and Hand Power Machinery Sold on Trial. Catalogue Free.

SENECA FALLS MFG. CO.,
46 Water St SENECA FALLS, N. Y.

Two Special Offers.

As explained in former ads., publishers can afford to put forth extra efforts in securing new subscribers; as the majority remain, once they become subscribers to a good journal. It is from this point of view that I make the following offers:

Offer No. 1.

To any one not a subscriber to the Review who will send me \$3.00, I will send the Review one year and 1,000 strictly first-class, snow-white one-piece Sections. After accepting this offer if any one wishes to buy more sections, I will furnish them at the following prices: 1,000, \$2.75; 2,000 for \$5.25; 3,000 for \$7.50; 5,000 for \$12.00. Sections will be shipped from any of the following points: Flint, Mich.; Chicago, Ill.; Medina, O.; Jamestown, N.Y.; Higginsville, Mo.; or Omaha, Neb.

Offer No. 2.

To any one not a subscriber to the Review who will send me \$1.50, I will send the Review one year and a fine, TESTED Italian Queen. Purchasers may have either the bright, golden strain, or the dark leather-colored reared from imported mothers. After accepting this offer, if any one wishes more queens, they will be furnished at the following prices: Single queen, 90 cts.; 3 for \$2.65; 6 for \$5.00; 12 or more at 75c each. Orders will be filled in rotation, and safe arrival guaranteed.

If you are not acquainted with the Review, and wish to see it before subscribing, send 10 cents for three late but different issues, and the 10 cents may apply on any subscription sent in during 1898.

W. Z. HUTCHINSON.

FLINT, MICH.



The Nickel Plate Road

will sell excursion tickets to Chautauque Lake and return on July 8, at one fare for the round trip, with return limit of 30 days from date of sale by depositing tickets with Secretary of Chautauque Assembly. Tickets good on any of our through express trains. Cheap rates to many other points East. Communicate with this office, 111 Adams St., Chicago, for any further information desired. Van Buren Street Passenger Station, Chicago. Tel. Main 3389. (41-26-2)

colony of my bees this spring. Along the first of June I opened hive No. 38 to see how they were getting along. Well, I found two capt queen-cells and some not yet capt. Thinking they were about ready to swarm, I closed the hive and gave orders to watch for a swarm the next day from No. 38. The next day came, but the swarm did not. The second day and no swarm. So I waited five days and not an (external) sign of a swarm. Then I opened the hive again, and on the first frame I found a ball of bees. Says I to myself: "You are going to supersede your queen, and are killing your mother." So thinks I, "I'll save her"—a young tested queen one year old. I caught hold of her wing, and, to my astonishment, it was a young queen instead of the old one. Then the other frames were examined and the old queen was found to be all right.

The virgin that had been bailed hatch out of one of the cells that were found capt on the first examination. A few days later another virgin was found dead in front of that hive. Now, why did they allow those cells to hatch if they did not want any of the queens? The weather was warm and fair at that time. Or, why did they not swarm?

PAUL WHITEHEAD.

Luzerne Co., Pa., June 22.

The Foul Brood Inspector.

On page 332 I ask Mr. Lovesy, of Utah, why Utah's bee-keepers can't guard themselves against foul brood as well as an inspector? In reply I am askt how the bee-keepers could interfere with the bees of any person without an inspector who shall visit every apiary in his district at least once a year to eradicate all foul brood and kindred disease.

Mr. L. says whether this is satisfactory to me or not he fails to see anything so very monstrous in this law. Don't be mistaken. I want to encourage and protect the bee-industry, like you, but we differ in the means. I want a law against all that's foul—not foul brood only; but I don't want so many inspectors. There are more officers than bee-hives already; decrease them and increase the bee-hives—that makes less burden and more honey, and therefore it is better.

About foul brood, every bee-keeper can learn as much as an inspector. Let each one learn by distributing good periodicals like the American Bee Journal; teach him to observe, and to act, and by law compel him to restrain from every harm towards the community. By creating inspectors you make everybody pay for a few neglectful persons. Make these persons pay for their neglect—that's enough.

If you have fire on your place you will have to guard, and not an inspector; and if you do harm to your neighbors you must bear the consequences. Every person is cautioned under the penalties of law to watch his apiary, that disastrous thing called foul brood, that destroys so many colonies only by neglect. This is a correct way to protect the bee-industry.

An inspector visiting every hive at least once a year is a monstrous thing. I am going to show you it is. You know small-pox, cattle-fever, hog-cholera, and San Jose scale are things as bad as a mad dog. Have you an inspector visiting at least once every year your family to find out if there is small-pox, or visit-

ing your stables to find out about cattle-fever, visiting your hog-pens to find out about cholera; visiting your orchard to find out about the pernicious scale, or visiting your dog about his madness? Oh, no! If you would need an inspector for this you would better have no children, no cows, no hogs, no fruit-trees, and no dog. If you need an inspector for foul brood you would better have no bees. That inspector can't help you among so many—help yourself! This is and ought to be the first axiom. The inspector might visit you one week, and the disease the next, therefore such an inspection without a good education is monstrous. Anyhow, Utah's foul brood law can be dissatisfactory only for those who are taxt for it. In this respect I don't care for it as I would not care for it if there would be a face in Utah with an unusually long-pointed nose. But if the man with that nose would say: "There is a nose finer than any nose in Wisconsin," then he must allow being told, "Your nose is very satisfactory, but you could do with half an inch less."

You criticised Wisconsin's foul brood law and called yours better because it provides an inspector for every district. Now, let me tell you, you might do better yet. Put an inspector on every bee-hive. That's probably an advantage over Wisconsin. But I think all these inspections could be done with half an inch less. J. VOLKERT.

Chesterfield Co., Va.

[Mr. Volkert's ideas may be very good in theory, but they are quite impractical at the present time. It is one thing to say that all bee-keepers should be as well-informed on the subject of foul brood and its treatment as is Mr. McEvoy, the foul brood inspector of Ontario, Canada, but it would be quite another matter to do the educating or get the rank and file to take the interest in it that they should. We must take things as we find them, and then gradually improve them, but not try to do the impossible at first.—EDITOR.]

A Young Bee-Keepers' Experience.

I have but 5 colonies now, numbered 1, 2, 3, 4, 5—1 and 5 in 10-frame hives, and 2, 3 and 4 in 8-frame. No. 5 is a swarm that came out May 25. No. 4 was a last year's late swarm; 1, 2 and 3 are 2 years old.

Last year my bees did no good. I had 5 colonies, and got only about 75 pounds of honey, and one swarm; and all the bee-men say that the bees would not work last year on the little white clover, while we had a very good crop of it; consequently there had to be a great deal of failing.

This year the prospect was better at the start, but got nipt in the bud. In March we had very fine weather, and the brood-combs were well-filled with brood, but there were few bees. In April we had some very cold weather, and the bees could not protect the young bees and larvae, consequently it died in the cell except in the strong colonies. The weak ones have not yet recovered from the setback.

Another thing I do not understand: I have sat at my hives for two hours at a time watching for drones, and have taken out all the frames, and I do not

"A Queenly Deceiver."

"He fools his customers by sending more than is expected."—See page 105, current volume Bee Journal, and ask for the free pamphlet referred to. I am now prepared to fill orders promptly with FINE YELLOW-TO-THE-TIP QUEENS, or daughters of imported stock mated to golden drones, at 75c each. Purely-mated Queens reared from the best stock and by the best method known, is what I furnish, and will prove it to all who give me a chance. Money Order Office, Warrenton.

Address, W. H. PRIDGEN.

22Atf Creek, Warren County, N. C.
Please mention Bee Journal when writing.

Queens, Bees and Bee-Keepers' Supplies

Tested Queens in April and May, \$1.00. Untested, 75c. Choice Breeders, either three or five-banded Italians, at \$2.00. Choice Imported Breeders, \$5.00. Satisfaction guaranteed. Send for Price-List to

F. A. CROWELL,

8Atf GRANGER, MINN.
Please mention Bee Journal when writing.



SEE THAT WINK!

Bee - Supplies! Root's GOODS at Root's Prices. Ponder's Honey - Jars, and every thing used by bee-keepers. Prompt service, low freight rate. Catalog free. Walter S. Ponder, 512 Mass. Ave., INDIANAPOLIS, INDIANA.

Please mention Bee Journal when writing.

QUEENS Italian stock. Untested, 70c each; 3 for \$2.00. After July 1, 50 cents each; tested, \$1.00 each. Root's Goods at Root's Prices. Prompt shipment and satisfaction guaranteed. Catalog free.

THEODORE BENDER, Canton, Ohio.

20Atf Please mention Bee Journal when writing.

THE PLACE TO GET YOUR

QUEENS

Is of H. G. QUIRIN, of Bellevue, Ohio.

Ten years' experience with the best of methods and breeders enables him to furnish the best of Queens—Golden Italian—Doolittle's strain—warranted purely mated, 75c each; 6 for \$4. After June, 50c; 6 for \$2.75. Leather Colored same price. Safe arrival. Will run 1,200 Nuclei, so there will be no waiting for your Queens. 23A16t

Please mention Bee Journal when writing.

READY TO MAIL

My 40-page Catalog of my Specialties, and Root's Goods at their prices. I carry a full line of BEE-KEEPERS' SUPPLIES, and can ship promptly. Catalog Free.

GEO. E. HILTON, Fremont, Mich.

Please mention Bee Journal when writing.

The RURAL CALIFORNIAN

Tells all about Bees in California.

The Yields and Price of Honey; the Pasturage and Nectar - Producing Plants; the Bee-Ranches and how they are conducted. In fact the entire field is fully covered by and expert bee-man. Besides this, the paper also tells you all about California Agriculture and Horticulture. \$1.00 per Year; Six Months, 50 cents. Sample Copies 10 cents.

THE RURAL CALIFORNIAN,

218 N. Main St., LOS ANGELES, CALIF.
Please mention Bee Journal when writing.

One Fare for the Round Trip

To Buffalo, N. Y., and return, account Baptist Young People's Union meeting, July 14-17. Rates lower than via other lines. For full information call on or address J. Y. Calahan, General Agent, 111 Adams Street, Chicago. Telephone 3389 Main. (30)

think I have seen a half dozen drones in my apiary. June 22 I weighed my bees, and No. 1 was 45 pounds net, or deducting the weight of the hive; No. 2, 15 pounds; No. 3, 11 pounds; No. 4, 24; and No. 5, only 25 days old, weighed 56 pounds net, or 88 pounds gross; this is over 2½ pounds per day gain of honey, and yet none of my bees are working in the supers yet.

I gave them all good, clean supers, with new sections and starters. They all seem to be very busy, working nicely, but are neither swarming nor putting honey into the supers.

I am young in the bee-business, and I am going to experiment some on those two weak colonies. If I lose them it will not be much loss, and if I gain it will be so much ahead.

I was told by old bee-men that I could not rear bees on sugar, but all the same I did. I caught a nice swarm some years ago in August, about the 20th, and on the first of November they had about 3 pounds of honey and about a half gallon of bees. I fed them sugar, about 25 pounds, during the fall and spring, and the same colony gave me in return for my kindness 24 pounds of section honey, and 2 good swarms, the next year.

On page 369, is given cold water vs. hot for bee-stings. A few years ago I undertook to capture a runaway swarm of bees, and did capture them. I got the bees to settle all right, but when I went to live them it seemed to me they just all let go of the cluster and began to sting me. I did not put on any protection, and I was stung all over the hands, arms, legs, face and neck, and then they were not satisfied, but they crawled down my back and stung my body. In trying to get away from them I got one hand in the mud, and it seemed to ease me, so that I just plastered myself with a thin mud, of clay and water, and there was scarcely any swelling, and it did not make me the least bit sick or sore. Since then this is the only remedy I have for bee-stings. S. R. GUSEMAN.

Preston Co., W. Va., June 26.

Rendering Combs in Iron Kettles.

I send you sample of wax which has been boiled in an iron kettle, and I will tell the best I can how it was made. I first put the combs into the kettle and then put wire-cloth over them and weighed them down to keep them in the bottom of the kettle, and then filled it with soft water. I do not boil any after all the combs are melted. I took a dipping-board and dipt the wax out of the kettle while hot, the same as dipping for foundation sheets. Allowing wax to cool in the kettle will darken it.

REUBEN PALMER.

Jefferson Co., Mo.

[The sample of sheeted wax has a beautiful golden color, and is quite clean and nice. From all that has been said against rendering combs in iron kettles, one would hardly believe that the sample sent was so rendered. But it may be all the trouble comes from allowing the wax to cool in the kettle, and thus darken it.—EDITOR.]

Basswood the Only Hope.

Bees have not done much since locust bloom, when they commenced working in the supers. White clover is in bloom,

but not as profusely as last year, and I think bees do not gather so much honey from it as last year. We can only hope yet for basswood, which is going to bloom soon. AUGUST BUCHHAGEN.
Jefferson Co., Ohio, June 27.

Everything Looks Favorable.

My 350 colonies of bees are in fine condition, working now on white clover. Basswood will begin to bloom about July 1. At present everything looks favorable for a large honey crop.
A. G. WILSON.
Vernon Co., Wis., June 27.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Page & Lyon Mfg. Co. New London, Wisconsin.

Operates two sawmills that cut, annually, eight million feet of lumber, thus securing the best lumber at the lowest price for the manufacture of

Bee-Keepers' Supplies.

They have also one **One of the Largest Factories** and the latest and most-improved machinery for the manufacture of

Bee-Hives, Sections, Etc.,

that there is in the State. The material is cut from patterns, by machinery, and is absolutely accurate. For Sections, the **clearest and whitest Basswood** is used, and they are polished on both sides. Nearness to Pine and Basswood forests, and possession of mills and factory equip't with best machinery, all combine to enable this firm to furnish the

Best Goods at the Lowest Prices.

Send for Circular and see the Prices on a Full Line of Supplies.



colored transparent Foundation. Improved Smokers and Honey Extractors, and all other first-class goods, are what we sell. Kind and courteous treatment and honorable dealing our motto. On these bases, we solicit an order, feeling sure that if we sell you one bill of goods you will be our customer in the future.

PROGRESSIVE BEE-KEEPER, 50c per year. "Amateur Bee-Keeper," 25c. Both for 65c. postpaid. Sample copy of the PROGRESSIVE free, and a beautiful Catalog for the asking.

Address, **Leahy Manufacturing Company, Higginsville, Mo., or 1730 South 13th St., Omaha, Neb.**

We want

EVERY BEE-KEEPER

.....To have a copy of.....

Our 1898 Catalog

Send us your name and address and we will take pleasure in mailing you a copy

G. B. LEWIS CO., WATERTOWN, WIS.

Special Agent for the Southwest—

E. T. ABBOTT, St. Joseph, Mo.

Mr. Abbott sells our Hives and Sections at factory prices.

Select-Tested Golden Adel Queens.

Each, \$1.00. A non-swarming and non-stinging strain of golden bees. "How to Prevent Honey Candyling" given to each customer. Tested Queens, each, 75 cents.
26Atf
HENRY ALLEY, Wenham, Mass.

Basswood Honey FOR SALE

We have a limited number of barrels of **very best Basswood Extracted Honey**, weighing NET about 280 lbs. which we are offering at 6 cents per lb. f. o. b. Chicago. Do you want a barrel or so of it? If so, address, with the cash,

GEORGE W. YORK & CO., CHICAGO, ILLS.

The Baptist Young People's Union

Will be pleased with a ride to Buffalo and return over the Nickel Plate Road. Choice of water or rail route between Cleveland and Buffalo, within final limit of ticket. Call on or address J. Y. Calahan, General Agent, 111 Adams Street, Chicago, for particulars. Telephone 3389 Main. (29)

HONEY and BEESWAX

MARKET QUOTATIONS.

Chicago, June 18.—Not any new honey here, and the old stock is about exhausted. Market values about as last quoted for what little is being done. **H. A. BURNETT & CO.**

Kansas City, June 21.—We have several shipments of new comb honey from Florida, the first to our market this season. The demand is fair at 11 to 12c. The demand for extracted will be light until September.
C. C. CLEMONS & CO.

New York, June 20.—Comb honey: We closed out all of our old crop some time ago. We have received several lots of new crop from the South, good, No. 1 white, which sells readily at 11c per pound.

Extracted: Receipts of new crop from the South are large. We quote: Common, 48 to 50c a gallon; good, 52 to 55c a gallon; choice, 5 to 5½c pound. Demand is good, especially for the better grades. Beeswax remains firm at 28 to 29c. **HILDRETH BROS. & SEGELKEN.**

Cincinnati, June 9.—Demand is slow for all kinds of honey, especially comb. Prices for best white comb honey, 10 to 13 cents. Extracted honey brings 3½ to 6c, according to quality. Beeswax in good demand at 25 to 28c for good to choice yellow.
CHAS. F. MUTH & SON.

Boston, June 9.—Fancy white in cartons, 13c.; A No. 1 white in glass-front cases, 11 to 12c.; No. 1, 10 to 11c.; No. 2, 8 to 9c. Extracted, white, 6 to 7c; light amber, 5 to 6c. Beeswax, pure, in good demand with very light supply, 30c.

At the present time the demand for both comb and extracted honey is very light with but little stock on hand.

BLAKE, SCOTT & LEE.

Cleveland, June 9.—Fancy white, 12 to 12½c.; No. 1, 11c.; No. 1 amber, 9 to 10c.; buckwheat, 8c. Extracted, white, 6c.; amber, 4 to 5c.
A. B. WILLIAMS & CO.

San Francisco, June 8.—White comb, 8½ to 10c; amber, 6½ to 7½c. Extracted, white, 5½ to 6c.; light amber, 4½ to 5½c. Beeswax, 23 to 25c.

Not much now coming forward from any quarter. Supplies will doubtless be light throughout the season, admitting of little other than small local trade. Former quotations remain in force, with tendency on best qualities to higher figures.

Detroit, June 9.—Fancy white honey is lower and now quoted at 11c. No. 1, 9 to 10c; fancy dark, 7 to 8c; No. 1 dark, 6 to 7c. Extracted, white, 5 to 6c; dark, 4 to 5c. Beeswax 27 to 28c.

There are no changes in quotations, and very little desirable honey left. Sales are so slow that it is difficult to quote. The poor lots are being pushed at what they will bring.

M. H. HUNT.

Minneapolis, June 9.—Honey much more encouraging. Fancy white clover comb is selling here now at 10½ to 11½c. Not advisable to ship darker than amber. Extracted fancy white clover, 5½ to 6c; amber, 5c; dark, 4 to 4½c.

Outlook for honey much more encouraging.
S. H. HALL & CO.

Indianapolis, June 9.—Fancy white 11 to 13c.; No. 1, 10 to 11c.; fancy amber, 9 to 10c. Extracted, white, 5 to 6c. Beeswax, 25 to 27c. Market appears to be well supplied and sales are rather slow for this time of the year. This is especially true of the amber and dark grades of comb honey. Beeswax is in good demand.
WALTER S. POWDER.

Milwaukee, June 9.—Fancy 1-pound sections, 11 to 12c.; A No. 1, 10 to 11 cents; No. 1 8 to 10c; amber, 8 to 8½c; dark, 7 to 7½c. White extracted in barrels and kegs, 5½ to 6c; amber, 5 to 5½c. Beeswax, 26 to 28c.

The demand for honey continues very good indeed, and values fairly sustained. While the best grades are most salable, the inferior grades meet attention, and the movements are quite satisfactory. **A. V. BISHOP & CO.**

Buffalo, June 9.—There is a very good demand for strictly fancy 1-pound comb, at 10 to 11c.; other grades, however, range from 9 to 7c., and even 6c. when poor enough. Quite an amount of honey can be sold at this range. Extracted ranges from 4 to 6c., with a moderate demand.
BATTERSON & CO.

St. Louis, June 10.—Fancy white comb, 10 to 11c.; No. 1, 10c.; amber, 9 to 10c.; dark, 8 to 9c. Extracted, white, 5½ to 6c.; amber, 5 to 5½c.; dark, 4 to 4½c. Beeswax, 20 to 22c.
WESTCOTT COM. CO.

Talk about ... Comb Foundation

WE can now furnish the very best that can be made from pure wax. Our New Process of **Milling** enables us to surpass the previous efforts of ourselves and others in the manufacture of Comb Foundation.

**It is always Pure and Sweet.
It is the kind that does not sag.
It is the kind you want.**

If you once try it you will have no other. Samples furnished **FREE**. Large illustrated Catalog of all kinds of

Bee-Keepers' Supplies,

And a copy of the American Bee-Keeper, sent upon application. Address,

**THE W. T. FALCONER MFG. CO.,
JAMESTOWN, N. Y.**

Please mention Bee Journal when writing.

NEW YORK,
is the city
105 Park Place,
is the street.
I. J. STRINGHAM,
is the man

Who is prepared to ship you, on short notice, **anything** in the apian line.

Are YOU the man who wants to buy?

Send for Catalog, anyway.

Please mention Bee Journal when writing.

CARLOADS—



Of Bee-Hives, Sections, Shipping-Cases, Comb Foundation, and **Everything** used in the Bee-Industry.

We want the name and address of every Bee-Keeper in America. We supply Dealers as well as consumers. We have Dry Kiln, Improved Machinery, 40,000 feet of floor space, and all modern appliances. We make prompt shipment.

Write for Catalogs, Quotations, etc.

**Inter-State Manufacturing Co.,
HUDSON, St. Croix Co., WIS.**

Please mention Bee Journal when writing.

The A. I. Root Co.'s Goods Wholesale.

Including their discounts for Goods wanted for use another season. It will pay you to send me list of Goods wanted. **M. H. HUNT** Cash for Beeswax. **BELL BRANCH, MICH.**

Please mention Bee Journal when writing.

I ARISE



TO SAY to the readers of the **BEE JOURNAL** that **DOOLITTLE**

has concluded to sell **—BEEES and QUEENS—** in their season, during 1898, at the following prices:

One Colony of Italians on 9 Gallup frames, in light shipping-box \$6.00
Five Colonies..... 25.00
Ten Colonies..... 45.00
1 untested queen. 1.00
6 " queens 6.50
12 " " 10.00
1 tested Queen... \$1.50
3 " Queens. 3.50
1 select tested queen 2.00
3 " " Queens 4.00

Select tested queen, previous season's rearing. 3.00
Extra Selected for breeding, **THE VERY BEST**. 5.00
About a Pound of **BEEES** in a Two-frame Nucleus, with any Queen, \$2.00 extra.

Circular free, giving full particulars regard the Bees and each class of Queens.

G. M. DOOLITTLE,

11A25t

BORODINO, Onon. Co., N. Y.

21st Year Dadant's Foundation. 21st Year

Why does it sell so Well?

Because it has always given better satisfaction than any other.
Because **IN 21 YEARS** there have not been any complaints, but thousands of compliments.

We Guarantee Satisfaction.

What more can anybody do? **Beauty, Purity, Firmness, No Sagging, No Loss.**
PATENT WEED PROCESS SHEETING.

Send Name for our Catalog, Samples of Foundation and Veil Material. We sell the best **VEILS**, cotton or silk.

BEE-KEEPERS' SUPPLIES OF ALL KINDS.

LANGSTROTH ON THE HONEY-BEE, Revised.
The Classic in Bee-Culture—Price, \$1.25, by mail.

BEE SWAX WANTED AT ALL TIMES.

CHAS. DADANT & SON,

Please mention the Am. Bee Journal.

HAMILTON, Hancock Co., ILL.

OUR MOTTO—"Well Manufactured Stock! Quick Shipments!"

SECTIONS, SHIPPING-CASES, AND BEE-KEEPERS' SUPPLIES.

We make a specialty of making the very best Sections on the market. The **BASSWOOD** in this part of Wisconsin is acknowledged by all to be the best for making the **One-Piece Honey-Sections**—selected, young, and thrifty timber is used.

Write for Illustrated Catalog and Price-List **FREE**.

MARSHFIELD MFG. CO., Marshfield, Wis.

Please mention the American Bee Journal when writing.

ROOT'S GOODS.

Our Specialties:

The Fence and Plain Sections.
Weed New Process Foundation.
Cowan Extractors.
Porter Bee-Escapes—the best made.
Dovetailed Hives—with Danz. Patented Cover and Bottom.
Danzenhaker Hives.
No-Drip Shipping-Cases.
Gleanings in Bee-Culture, Illustrated, Semi-Monthly.

Catalog of Goods and Sample Copy of Gleanings sent for your name on a postal.

THE A. I. ROOT CO.

Branch Offices:

118 Michigan Street, Chicago, Ill.
1024 Mississippi Street, St. Paul, Minn.
1635 W. Genesee St., Syracuse, N. Y.
10 Vine Street, Philadelphia, Pa.
Mechanic Falls, Me.

MEDINA, OHIO.